SECTION J

LIST OF ATTACHMENTS

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SECTION J - LIST OF ATTACHMENTS ATTACHMENT A - LIST OF ACRONYMS

The following list of acronyms may be used in this contract.

ACWP Actual Cost of Work Performed Alternative Dispute Resolution ADR

American Federation of Labor-Congress of Industrial Organizations AFL-CIO

As Low As Reasonably Achievable ALARA

American Society of Mechanical Engineers ASME American National Standards Institute ANSI **Budgeted Cost of Work Performed BCWP Budgeted Cost of Work Scheduled BCWS**

B&R **Budgeting and Reporting**

CD-ROM Compact Disc-Read Only Memory

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act of

CFR Code of Federal Regulations

CO Contracting Officer

COR Contracting Officer Representative

Cost Performance Index CPI CPIF Cost Plus Incentive Fee

Contracts Requirements Document CRD Cost and Schedule Performance Index CSPI DEAR Department of Energy Acquisition Regulation

Direct-Feed Low-Activity Waste **DFLAW**

DNFSB Defense Nuclear Facilities Safety Board

DOE U.S. Department of Energy **Data Quality Objective** DQO

ECOLOGY Washington State Department of Ecology

EMR Experience Modification Rate

U.S. Environmental Protection Agency EPA

Emergency Planning and Community Right-To-Know Act of 1986 **EPCRA**

Environment(al), Safety, and Health

Employee Retirement Income Security Act of 1974 **ERISA**

ESQ&H

Environment(al), Safety, Quality and Health

Federal Acquisition Regulation FAR

Foreign Ownership, Control or Influence FOCI

FΥ Fiscal Year

ES&H

HCA Head of the Contracting Activity

HLW High-Level Waste

HUBZone Historically Underutilized Business Zone Hazardous Waste Management Act **HWMA**

ICD Interface Control Document

ISMS Integrated Safety Management System Job Opportunities Bulletin Board System **JOBBS**

LAW Low-Activity Waste Land Disposal Restrictions LDR **MEPP** Multiple Employer Pension Plan

MS Mail Stop

MSDS Material Safety Data Sheet Metric Tons of Glass MTG

National Environmental Policy Act of 1969 NEPA

Nuclear Quality Assurance NQA NOC Notice of Construction Notice of Violation NOV

NOAV Notice of Alleged Violation
NRC Nuclear Regulatory Commission

NTE Not to Exceed

OCI Organizational Conflict of Interest

OPSEC Operations Security

ORP U.S. Department of Energy, Office of River Protection OSHA Occupational, Safety and Health Administration

PBS Project Breakdown Structure

PSD Prevention of Significant Deterioration
PAAA Price Anderson Amendments Act of 1988

PL Public Law

PCB Polychlorinated biphenyls
PPA Pollution Prevention Act of 1990

ppm Parts Per Million

QARD Quality Assurance Requirements and Description for the Civilian Radioactive

Waste Management Program

RCRA Resource Conservation and Recovery Act of 1976

RFP Request for Proposal

RL U.S. Department of Energy, Richland Operations Office

ROD Record of Decision
RPP River Protection Project
SAS Safeguards and Security
SEB Source Evaluation Board

SF Standard Form

SIC Standard Industrial Classification

SIL-2 Safety Integrity Level – 2
SPI Schedule Performance Index
SRD Safety Requirements Document

TBD To Be Determined

TIN Taxpayer Identification Number

TPA Hanford Federal Facility Agreement and Consent Order (also known as Tri-Party

Agreement)

TRU Transuranic (waste)

TSCA Toxic Substances Control Act of 1976
TSR Technical Safety Requirements

UCNI Unclassified Controlled Nuclear Information

USC United States Code

WAC Washington Administrative Code WBS Work Breakdown Structure

WDOH Washington State Department of Health WTP Waste Treatment and Immobilization Plant

SECTION J – LIST OF ATTACHMENTS ATTACHMENT B - HANFORD SITE SERVICES AND INTERFACE REQUIREMENTS MATRIX (525)

HANFORD SITE SERVICES AND INTERFACE REQUIREMENTS MATRIX

Services listed in the Hanford Site Services and Interface Requirements Matrix (Matrix) shall be performed in accordance with the Hanford Mission Integration Solutions (HMIS) Section H Clause entitled, Hanford Site Services and Interface Requirements Matrix.

All services are provided during the Hanford alternate work schedule (AWS) defined as 7:00 a.m. to 4:30 p.m. Monday through Thursday and 7:00 a.m. to 3:30 p.m. on standard Site Fridays unless otherwise noted. An additional AWS is defined as 6:00 a.m. to 4:30 p.m. Monday through Thursday (4x10 schedule) to align with the other Hanford Site contractors work schedule. Hanford Site contractors can request work outside of this schedule by providing a statement of work and requesting that scope as a usage-based service.

Legend for Matrix – The legend for the primary matrix users/providers is as follows:

HMESC Hanford Mission Essential Services Contract

CPCC Central Plateau Cleanup Contract

TOC Tank Operations Contract

WTP Waste Treatment and Immobilization Plant Contract

222-S Lab 222-S Laboratory Contract

Other Site Users Examples include: Occupational Medical Services Contractor (OccMed), Energy Savings Performance Contractor (ESPC), Pacific Northwest National Laboratory (PNNL) [activities located on the Hanford Site], Laundry Services Contractor, DOE, etc.

Hanford Site Contractors General term used to collectively refer to all the above users/providers.

Types of Interfaces -

- 1. Information: knowledge (data, facts, etc.) gathered or supplied
- Physical: systems in tangible contact (i.e., 'pipe-to-pipe'), or a physical exchange of product or materials
- 3. Service: provision of work for another contractor

	HMESC SERVICES AND INTERFACE ACTIVITIES										
	HMESC General Requirements										
Interface Number	Interface Interface Title Interface Cost Type Service Type HMESC CPCC TOC WTP Lab/OccMed/										
1	Hanford Site Integration	Information	Direct-Funded	Interface	service and	Provide input to HMESC		Provide input to HMESC	Provide input to HMESC		

Service Description

- HMESC provides DOE with an unfiltered, forward-looking forecast of emerging, crosscutting issues that could affect Hanford Site
 contractors, and shall identify longstanding or emerging crosscut issues that affect efficient Hanford Site operations and provide
 recommendations for improvement in collaboration with the OHCs. Additionally, HMESC shall facilitate crosscutting inter-contractor Site
 integration opportunities and lead/facilitate DOE directed integration initiatives. Examples of integration activities include opportunities for
 more efficient use of Site resources such as business systems, training, and crosscutting issues, such as traffic safety.
- HMESC shall develop the annual Infrastructure Services and Alignment Plan (ISAP). ISAP is the strategic plan for right-sizing the infrastructure to support the future Hanford Site mission and the Annual Forecast of Services and Infrastructure is a projection of needed utilities, services, and infrastructure from other Hanford Site contractors. The ISAP will be approved by DOE.
- HMESC shall develop, maintain and update an ISAP and the Annual Forecast of Services and Infrastructure, which includes the costs for services. Proposed changes in service providers shall include a justification, and a plan forward.
- HMESC shall solicit input from Hanford Site contractors/users for the ISAP and the Annual Forecast of Services and Infrastructure.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
2	Hanford Site Interface Management	Information	Direct-Funded	Interface	Provide service and receive input from site contractors	Provide innut	Provide input to HMESC	Provide input to HMESC	Provide input to HMESC

Service Description

- HMESC supports the DOE Hanford Site Governance Policy. HMESC maintains the Hanford Interface Governance Process, which documents inter-contractor governance and interface management collaboration processes and tools through the Hanford Site Interface Management Plan.
- HMESC will collaborate with the OHCs on the Hanford Site Interface Management Plan and Governance Process (CDRL 0164). CPCC, TOC, 222-S Lab, and HMESC shall sign the Hanford Site Interface Management Plan and Governance Process.
- HMESC shall chair the Contractor Interface Board (CIB), as identified in the DOE Hanford Site Governance Policy. The CIB identifies, reviews, and recommends actions for key site-wide operational, business, contractual, and interface management issues.
- The CIB will work to resolve all issues and elevate strategic, unresolved inter-contractor issues to the Hanford Leadership Council for resolution, as necessary.
- HMESC, CPCC, and TOC shall maintain a central repository for their own inter-contractor interface agreements, located on their Interface Management webpage.
- Each service provider listed in the J-3 Matrix shall develop Service Delivery Documents (SDDs) for services under their responsibility.
- HMESC and the OHCs will work collaboratively to resolve issues at the lowest possible level of operations.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors/users bear internal implementation costs.

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	Safety, Security and Environment										
Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts		
3	Protective Forces	Information / Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	N/A	Receive service from and provide input to HMESC		

Service Description

Protective Forces provides security for facilities possessing critical Safeguards and Security interests (e.g., special nuclear material). Coverage is provided 24/7 via the Hanford Patrol.

- HMESC shall provide Protective Force operations.
- Hanford Patrol shall provide random and special searches as required.
- Hanford Patrol shall provide Protective Force services for WTP facilities when turned over to TOC.

Usage-Based Services

N/A

Direct-Funded Services

Funded through HMESC; provided at no cost to Hanford Site contractors. Hanford Site contractors shall provide facility, operational, and system configuration changes that may affect Protective Force operations.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
4	Physical Security (PSS) Systems (Nuclear Material, Special Nuclear Material, and Classified Matter)	Information / Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	N/A	Receive service from and provide input to HMESC

Service Description

Physical Security under this activity is for accountable quantities of nuclear and classified materials, including performance testing, intrusion detection, entry/access control, explosive detection, locksmith services, and engineering and maintenance of the physical security and access control systems.

- HMESC shall provide Security Representatives for facilities or groups of facilities where there are important safeguards and security (SAS) assets.
- HMESC shall develop, or assist in the development of facility asset protection requirements and conduct annual reviews of Asset Protection Agreements.
- HMESC shall design security system upgrades for existing facilities with changing requirements and design security systems for new facilities.
- HMESC shall provide locksmith support for installation, replacement, and maintenance of locks, keys, and access control systems for the protections of Government property and nuclear materials, including special nuclear materials, classified matter, new facilities and WTP turnover facilities to TOC, etc.
- Hanford Site contractors shall provide the HMESC information about SAS arrangements and/or changes prior to new operations
 commencing, or changing operations or configurations that might alter the performance of existing SAS systems; support the HMESC in
 the development of or update of facility Asset Protection Agreements, and requesting locksmith services.

Usage-Based Services

N/A

Direct-Funded Services

Funded through the HMESC; provided at no cost to Hanford Site contractors with the exception of physical security upgrades within the facility - these may be shared costs between the HMESC and the Hanford Site contractor that has responsibility for the facility.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
5	Physical Security Systems (Government Property)	Information / Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Optional Receive service from and provide input to HMESC	Receive service from and provide input to HMESC. N/A PNNL

Service Description

Physical security under this activity is for Government property other than nuclear material, special nuclear material, and classified. Physical Security such as fences, locks, etc. through Asset Protection Agreements.

- HMESC shall develop, or assist in the development of facility asset protection requirements and conduct annual reviews of Asset Protection Agreements.
- Hanford Site contractors shall support the HMESC in the development of or update of facility Asset Protection Agreements and implement those agreements.
- HMESC shall provide Technical and Engineering Security services as required for the design and/or turnover of new facilities.
- Consistent with Interface Number 88, TOC shall be responsible for coordinating, planning, and paying for the WTP contractor's
 requirements for infrastructure, utility, and service support from the HMESC and CPCC as identified in the J-3 Hanford Site Services and
 Interface Requirements Matrix except for Interface Numbers 5, "Physical Security Systems (Government Property)," and 64, "Radio
 Services for Emergency Services." WTP shall be responsible for coordinating, planning, and paying for usage-based services requested
 from Interface Numbers 5 and 64.

Usage-Based Services

WTP may request service as a usage-based service.

Direct-Funded Services

HMESC bears the cost burden of program administration; Hanford Site contractors bear costs of physical security upgrades. If used by PNNL off Hanford Site, they pay full-cost.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
6	Information Security - (Operations Security (OPSEC)	Information / Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	N/A	Receive service from and provide input to HMESC (only DOE)

Service Description

The OPSEC Program helps ensure that sensitive information is protected from compromise and secured from unauthorized disclosure, and provides management with necessary information required for sound risk management decisions concerning the protection of sensitive information.

- HMESC shall implement a Hanford Site-wide program; assure conformity of implementation with OPSEC standards and requirements; conduct assessment(s) of all Hanford Site facilities having Category I special nuclear material (SNM) (or credible roll-up to Category I SNM); conduct reviews of all Hanford Site facilities that have the potential to process or store classified or sensitive information; and annually review and update the Critical Information List.
- Hanford Site contractors shall implement their internal OPSEC responsibilities, participate and support Hanford Site-wide OPSEC
 Working and Awareness groups; provide support to the HMESC OPSEC assessments; and support the annual review and update of the
 Critical Information List.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost of Program administration. Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
7	Information Security - Classified Matter Protection and Control (CMPC); Classification, Declassification and UCNI Program	Information / Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	N/A	N/A; 222-S Lab – Receive service from and provide input to HMESC

Service Description

The CMPC Program establishes control and accountability requirements for classified matter, marking of classified matter, reproduction, receipt and transmission, and destruction; and, physical protection requirements for classified matter in storage.

- HMESC shall provide a centralized CMPC, Classification, Declassification and Unclassified Controlled Nuclear Information (UCNI)
 Program that includes operation and management of the Classified Document Control Center and management of classified information in the records holding area.
- HMESC shall provide trained and authorized personnel to conduct inquiries for incidents of security concern, maintain the reporting database, and assist the contractor in report writing as required.
- Hanford Site contractors shall be responsible for maintaining an updated list of security containers, locations and custodians; support
 investigation of any incidents of potential or actual compromise of classified; and nominate a sufficient number of Derivative Classifiers
 and Reviewing Officials who shall be trained and approved by the HMESC.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the burden of Program administration; Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
8	Information Security - Official Use Only (OUO)	Information / Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	N/A	N/A; 222-S Lab – Receive service from and provide input to HMESC

Service Description

The OUO Program establishes controls to protect sensitive unclassified information as OUO.

- HMESC shall manage, integrate, and oversee implementation of a common Hanford Site-wide OUO program to ensure conformity of implementation by performing Hanford Site contractors and coordination of OUO education and awareness.
- Hanford Site contractors shall manage and implement an OUO information program consistent with the common Hanford Site-wide OUO information program.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost of Program administration; Hanford Site contractors /users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
9	Personnel Security – Badging	Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC. N/A for PNNL

Service Description

A DOE security badge is utilized for all DOE and contractor personnel to gain access to DOE-owned or -leased facilities or areas where DOE-sponsored work is ongoing.

- HMESC shall provide badging service for the Hanford Site, which includes manufacture, issuance, destruction, control, and accountability for DOE Standard, Hanford Specific, Temporary, and Personal Identify Verification badges.
- HMESC shall coordinate and initiate "STOP ACCESS" procedures, and control and issue private vehicle passes for Property Protection Areas.
- Hanford Site contractors shall obtain badging service from HMESC; participate in "STOP ACCESS" program; and obtain vehicle passes from HMESC.

Usage-Based Services

N/A

Direct-Funded Services

Funded through HMESC; provided at no cost to Hanford Site contractors. Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
10	Personnel Security – Access Authorization (Security Clearance) Processing Program	Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC, N/A for PNNL

Service Description

- The Access Authorizations (Security Clearances) Program involves processing, granting, and allowing individuals to retain an access authorization when their official duties require access to classified information or matter, or special nuclear material (SNM).
- HMESC shall process all security clearances in support of Hanford Site contractors. These activities include requesting, obtaining, maintaining, downgrading and terminating security clearances, including "Special Access" privileges (e.g., SIGMA). The clearance processing program shall include reviews of each requested clearance action to ensure adequate justification exists and that reporting requirements are met.
- Hanford Site contractors shall request and obtain personnel security clearances, including "Special Access" from the HMESC.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of Program administration; Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
11	Personnel Security – Human Reliability Program (HRP)	Information / Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	N/A	N/A	N/A

Service Description

The Human Reliability Program (HRP) on the Hanford Site is designed to ensure that individuals who occupy positions affording access to special nuclear material and classified materials programs meet the highest standards of reliability and physical and mental suitability.

- HMESC shall coordinate and track all Hanford Site drug and alcohol testing; HMESC shall notify the CPCC of drug and alcohol testing results.
- HMESC shall administer the HRP program, including initial and refresher training.
- CPCC shall identify HRP positions, submit requests to HMESC for enrollment in the Hanford Site HRP, and execute their portion of the HRP consistent with the Hanford Site HRP, as administered by the HMESC.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of Program administration; Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
12	Personnel Security – Workplace Substance Abuse Programs (WSAP)	Information / Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	N/A	Receive service from and provide input to HMESC, N/A for PNNL

Service Description

The WSAP is responsible for maintaining a workplace free from the use of illegal drugs, and is applicable to DOE contractors and their sub-contractors in testing-designated positions performing work at Sites owned or controlled by DOE under the authority of the Atomic Energy Act of 1954.

- HMESC shall administer the WSAP and maintain the procedures for testing and databases.
- HMESC shall notify the respective Hanford Site contractor of drug and alcohol testing results.
- Hanford Site contractors shall identify individuals in testing-designated positions and execute the program per the HMESC procedure.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of Program administration; Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
13	Personnel Security – Foreign National Visits and Assignments (FNVA)	Information / Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC (N/A PNNL)			

Service Description

- FNVA pertains to unclassified (and potentially classified) foreign national access to the DOE Hanford Site for information and technologies.
- HMESC shall process security plans for foreign visitors to Hanford Security areas, coordinate all FNVA requests, and submit to the appropriate contractor FNVA authority for approval.
- Hanford Site contractors shall notify the HMESC of potential foreign visitor or assignment, and prepare and submit security plans to HMESC for processing of the visit/assignment.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of Program administration. Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
14	Cyber Security – (Classified and Unclassified Cyber Security)	Information / Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	N/A; 222-S Lab – Receive service from and provide input to HMESC

Service Description

Classified/Unclassified Cyber Security Program identifies and protects classified, unclassified and sensitive information generated, processed and stored for the Hanford Site.

- HMESC shall provide a Hanford Site Classified Information Systems Security Officer; develop a Hanford Master Classified Information Systems Security Plan; ensure that all classified systems are certified and accredited; and implement the classified cyber security training program.
- HMESC shall implement a centralized Hanford unclassified computer security program.
- Hanford Site contractors shall manage and execute classified and unclassified cyber security responsibilities consistent with DOE requirements and the HMESC centralized program.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of Program administration; Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
15	Nuclear Material Controls and Accountability (MC&A)	Information / Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	N/A	N/A	N/A

Service Description

The MC&A Program provides control and accountability of nuclear materials within DOE.

- HMESC shall manage and conduct a centralized MC&A program for all accountable quantities of nuclear material on the Hanford Site, and approve all implementing procedures of Hanford Site contractors.
- Hanford Site contractors shall support HMESC in preparation and maintenance of a Hanford Site-wide MC&A Plan, administration of treaty related activities, performance of occurrence investigation and reporting, and scheduling of periodic inventories.
- Hanford Site contractors shall implement MC&A requirements per the Hanford Site-wide MC&A Plan. Hanford Site contractors are required to implement facility specific requirements.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the burden of Program administration. Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
16	SAS Program Management – Safeguards and Security (SAS) Awareness	Information / Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC. N/A for PNNL.

Service Description

SAS Awareness Program is used to inform Hanford Federal and contractor employees, subcontractors, and visitors of their SAS responsibilities and to promote continuing awareness of good security practices.

- HMESC shall provide SAS Awareness training for all Hanford Federal and contractor employees, subcontractors, and visitors; and conduct security training for all permanently badged employees on an initial and annual frequency to maintain appropriate levels of awareness.
- Hanford Site contractors shall comply with the requirements of the Hanford Security Awareness program, as administered by the HMESC.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost of Program administration; Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
17	SAS Program Management	Information / Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	N/A	Receive service from and provide input to HMESC. N/A for PNNL.

Service Description

SAS Program Management provides formal organized process for planning, performing, assessing, and improving the secure conduct of work in accordance with risk-based protection strategies.

- HMESC shall establish, manage, integrate and execute the processes and services that comprise the SAS Program Management, such as Program Planning, Oversight, and Administration; Security Conditions (SECON); Site Safeguard and Security Plan (SSSP); Vulnerability Assessments; Design Basis Threat; and safeguards and security training.
- Hanford Site contractors shall coordinate and interface with HMESC on SAS Program Management regarding SAS technical, cost, and schedule performance; comply with SECON activities; support the Site Safeguards and Security Plan (SSSP) development, etc.
- Hanford Site contractors shall manage their internal SAS Program Management activities.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost of Program administration Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
18	Site Training Services and HAMMER	Information / Service	Combination of Usage-Based and Direct-Funded	Mandatory for standardized training All other services under this activity are Optional	Provide service to site contractors	Receive service from and provide input or support to HMESC	Receive service from and provide input or support to HMESC	Optional	Receive service from and provide input to HMESC (Optional for PNNL)

Service Description

Site Training Services provides training facility, curriculum, and training delivery services to Federal, contractor, and subcontractor employees in support of the Hanford and PNNL missions consistent with the DOE, local, state, and Federal workforce training requirements.

- HMESC shall provide Hanford Site workers (and PNNL, as requested) mandatory standardized training as listed below and optional
 training as requested to support maintaining a qualified workforce, develop the Annual Training Needs Forecast and Plan, and operate
 the HAMMER facility.
- HMESC shall maintain the employee training records for training provided by HMESC.
- HMESC shall perform mask fit services for Hanford Site contractors.
- Hanford Site contractors shall provide training priorities, training needs, and input regarding standardized training programs.
- HMESC administers the HAMMER worker trainer program. HMESC and OHCs provide worker trainers in accordance
 with the HAMMER Worker Trainer interface agreement. HMESC will reimburse OHCs for worker trainer costs.
 Mandatory Standardized Training
- Hazardous Waste Operations and Emergency Response (HAZWOPER) Training
- Lockout/tagout of hazardous energy
- Permit required confined space entry
- Chronic Beryllium Disease Prevention Program (CBDPP)
- Respiratory protection program
- Hoisting and rigging

- Fall protection
- Electrical safety
- Radiation Safety (e.g., Radiological Worker I and II and Radiological Control Technician training).
- Criticality Safety
- Hanford General Employee Training

Usage-Based Services

Site training services, including maintenance of employee training records for training provided by HMESC and mask-fit services are usage-based services reimbursed by the user.

Direct-Funded Services

HAMMER base operations for the facility are at no cost to Hanford Site contractors for DOE-EM funded Work Scope.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
19	Fire & Emergency Response Services (Fire Prevention, Fire Suppression, Fire Investigations; Emergency Rescue; Emergency Medical Service and Patient Transport; Incident Command; and Hazardous Material and Chemical/ Biological/Radiological Emergency Response)	Information / Service	Combination of Usage-Based and Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC (includes PNNL, LIGO, Energy Northwest.) May include Non-Hanford Site areas designated by DOE

Service Description

Fire and Emergency Response Services provide fire prevention, fire suppression, fire investigations; emergency rescue; emergency medical service and patient transport; incident command; and hazardous material and chemical/biological/radiological emergency response for the Hanford Site and those non-Hanford Site areas designated by DOE.

- HMESC shall provide 24/7 fire-related protection of human life, property, and facilities; and operates basic and advanced life support emergency medical services.
- HMESC shall act as the Site Incident Command Agency for all fires and hazardous/radiological materials emergencies on the Hanford Site.
- Hanford Site contractors shall support facility access to the HMESC fire services personnel, and notify the Fire Department of work
 activities, events, incidents, etc., that may require Fire Services involvement and/or response (e.g., medical assistance, hazardous or
 radiological emergency help, etc.).
- The HMESC will provide support for HFD participation in drills and exercises.
- HMESC will enter into a subcontract relationship for services provided to PNNL. HMESC will invoice PNNL for services.

Usage-Based Services

Hanford Site Contractors pay for Confined Space Standby support.

Direct-Funded Services

Funded through the HMESC; provided at no cost to Hanford Site Contractors.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
20	Fire & Emergency Response Services (Fire Protection System Inspection, Testing, and Maintenance)	Information / Service	Combination of Usage-Based and Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC (RFAR only)	Receive service from and provide input to HMESC. The only service applicable to PNNL is Fire Protection Systems Testing in DOE owned facilities on the Hanford Site.

Service Description

Fire and Emergency Response Services also includes fire protection system inspection, testing, and maintenance of existing and new fire systems for the Hanford Site, including backflow prevention devices.

- HMESC shall provide a Fire Marshal with authority for fire protection system inspection, testing, and maintenance; respiratory protection services; building inspections; ignitable and reactive waste site inspections; pre-fire planning; etc.
- Hanford Site contractors shall be required to use certain mandatory Fire Services from the HMESC contractor in performance of this work scope (e.g., fire systems inspection, testing, etc.) consistent with the HMESC.
- Hanford Site contractors shall provide necessary facility support to enable HMESC access to OHC facilities.
- Hanford Site contractors perform certain passive fire system IT&M activities through mutually approved agreement.

Usage-Based Services

Hanford Site contractors are required to provide their own hardware projects.

Hanford Site contractors are required to pay for system deficiencies that entail a change to a facility configuration design drawing. The facility (Fire Protection) Design Authority shall determine if the fire protection system deficiency constitutes a configuration design change.

Direct-Funded Services

HMESC is direct-funded to maintain fire systems for each Hanford Site contractor.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
21	Emergency Operations (Centralized Hanford Site Emergency Preparedness Program)	Information / Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC			

Service Description

Emergency Operations consists of the Hanford Site-wide Emergency Preparedness (EP) Program, which includes operation of the Emergency Operations Center (EOC), Joint Information Center (JIC), requirements for hazards surveys and hazards assessments, training of EOC staff, Hanford Site-wide exercises, and facility-specific plans and procedures for EP development, training, drills and assessments.

HMESC shall:

- Coordinate, integrate, and maintain a centralized Hanford Site EP Program.
- Provide instruction in accordance with DOE/RL-94-02, Hanford Emergency Management Plan to all Hanford Site contractors and their subcontractors.
- Conduct or support emergency management surveillances and assessments and work with the Hanford Site contractors for corrective action implementation.
- Establish procedures and provide direction and coordination for the Hanford Site Occurrence Reporting Program.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors/users bear internal implementation costs. HMESC shall provide support for the Unified Dose Assessment Center (UDAC). Hanford Site contractors shall develop, maintain, and execute an Emergency Management Program as described in DOE/RL-94-02, *Hanford Emergency Management Plan* for facilities and waste sites under their control.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
22	Emergency Operations (Event Reporting; and Emergency Operations Center Shift Office)	Information / Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC		Receive service from and provide input to HMESC	Receive service from and provide input to HMESC

Service Description

Event Reporting is provided to ensure that DOE is kept fully informed about events that could adversely affect the health and safety of the public or the workers, the environment, the intended purpose of the facilities, or the credibility of the DOE.

- HMESC shall operate the Hanford Site-wide Emergency Operations Center (EOC) Shift Office.
- Hanford Site contractors shall report their environmental, safety, and health events and related information directly to DOE and to the EOC Shift Office.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
23	Site Safety Standards (Common Safety Processes)	Information / Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	N/A	N/A; 222-S Lab – Receive service from and provide input to HMESC

Service Description

Site Safety Standards are to be used by Hanford Site contractors to ensure common processes for worker safety.

- HMESC shall obtain affected Hanford Site contractor approval and establish common safety processes on the Hanford Site as listed below.
- HMESC shall maintain a site-wide web-based system with input from other Hanford contractors for sharing operating experiences and lessons learned with a focus on preventing recurrence of safety or reliability events, and to share good work practices in accordance with DOE O 210.2.
- HMESC, CPCC, 222-S Lab, and TOC shall work collaboratively and build coalitions with Hanford Site contractors and workers to continue to build a strong and enduring safety culture. Based on input from Hanford Site contractors and workers, the HMESC with the CPCC, 222-S Lab, and TOC shall identify DOE opportunities to enhance and measure the Hanford safety culture.
- HMESC shall manage and administer Hanford Site safety activities/initiatives, such as, Annual Safety Exposition, Hanford Worker Electrical Safety Board, etc., as approved by DOE.
- Affected Hanford Site contractors shall approve common safety standards and develop internal implementing procedures, and participate in Hanford Site safety activities/initiatives, where appropriate, as administered by HMESC.

Common Safety Processes.

- 1. Lockout/tagout of hazardous energy
- 2. Permit required confined space entry.
- 3. Chronic Beryllium Disease Prevention Program (CBDPP).
- 4. Respiratory protection program.

- 5. Hoisting and rigging
- 6. Fall protection.
- 7. Electrical safety.
- 8. Industrial hygiene exposure records including the generation, common database, and storage.
- 9. Employee job task analysis (EJTA) as being implemented on the Hanford site at the present time.
- 10. Excavation permits with emphasis on the existing Hanford site system for obtaining excavation permits.
- 11. Hazardous Chemical Reporting: Community Right-to-Know with the HMESC responsible for obtaining data from other Hanford site contractors, compiling and submitting the required data.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
24	Radiological Assistance Program (RAP)	Information / Service	Direct-Funded	Mandatory	Provide service	Provide staff to HMESC	Provide staff to HMESC	N/A	N/A

Service Description

RAP provides first-responder radiological response capabilities 24/7 for the Hanford Site and Region 8 (states of Alaska, Oregon, and Washington).

- HMESC shall maintain and implement a first-responder radiological assistance that includes plans, procedures, resources and 24/7 response capabilities for Region 8 in support of the DOE Regional Response Coordinator and provide equipment.
- CPCC and TOC shall provide qualified personnel, technical expertise, and support to the DOE Region 8 RAP to ensure maintenance and staffing of emergency teams with the ability to respond under the direction of DOE National Nuclear Security Administration (NNSA) and the U.S. Department of Homeland Security.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration to include travel, equipment, and RAP specific training. CPCC and TOC provide personnel and bear personnel costs associated with RAP participation. PNNL also provides personnel to RAP, but is funded through HMESC.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
25	Environmental Regulatory Management (Site-wide permits, permit applications, and reports; Site-wide NEPA documents; Site- wide environmental reports; Site- wide (environmental) Quality Assurance standards; allocation of permit limits)	Information / Service	Direct-Funded	Mandatory	Provide service to site contractors and input to CPCC	Receive service from and provide input to HMESC. Provide service to manage issuance of the Hanford Facility RCRA Renewal Permit (Rev. 9)	Receive service from and provide input to HMESC and CPCC	Receive service from and provide input to HMESC and CPCC	Receive service from and provide input to HMESC and CPCC

Service Description

Environmental Regulatory Management ensures a Site-wide environmental program which is compliant with applicable laws, regulations, DOE directives and the Section H Clause entitled, Environmental Responsibility.

HMESC shall establish and provide site-wide management, administration, integration, permitting and compliance in coordination with other Hanford Site contractors. The HMESC shall obtain concurrence from affected Hanford Site contractors for Site-wide environmental documents. HMESC performs all near-field monitoring activities for the Hanford Site, including near-field monitoring required by a facility specific permit. As an exception, CPCC will manage issuance of the Hanford Facility Resource Conservation and Recovery Act (RCRA) Renewal Permit (Rev. 9).

CPCC shall also facilitate resolution of regulatory issues associated with Rev. 9 issuance. This also applies to units that will be initially incorporated into the existing permit (Rev. 8c) and transitioned into Rev. 9.

Hanford Site contractors shall:

• Provide input for the Site-wide Environmental Management System (EMS) Program Management Plan.

- Integrate their environmental permitting and regulatory compliance activities with the Hanford site-wide permitting and compliance framework maintained by the HMESC.
- Provide appropriate and timely input to the HMESC and other designated Hanford Site contractors for regulatory required Site-wide environmental reports and metrics for their facilities and activities.
- Support HMESC in their Site-wide environmental regulatory management roles.
- Support CPCC in managing activities associated with RCRA renewal permit issuance (Rev. 9).
- Support CPCC in facilitating activities associated with incorporating new unit-group requirements into the existing RCRA permit (Rev. 8c).
 This includes timely schedule status updates, participation in issue resolution activities, and working in good faith toward Rev. 9 issuance.
- Provide legally and regulatory required air and liquid effluent and near facility environmental monitoring; collect, compile, and/or integrate air and liquid effluent monitoring data from operations and activities under their control.
- Provide appropriate environmental data for its facility and operable units to support Hanford Site assessments and preparation of the annual Hanford Site Environmental Report. Obtain unit specific permit modifications in coordination with the HMESC.
- Inform HMESC if any near-field monitor(s) are required as part of contractor's facility monitoring.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. CPCC bears the cost burden for managing RCRA renewal permit issuance activities (i.e., coordination and integration with DOE offices and contractors on schedule and resolution of crosscutting issues with Rev. 8c and Rev. 9 issuance).

Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
26	Seismic Monitoring Services	Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC			

Service Description

Seismic Monitoring Services are required to operate the Hanford Site seismic network and provide report activities as needed. This information is utilized for operational facilities, to support new facility design and for emergency operations activities.

- HMESC shall maintain seismic sensors and systems, monitor seismic activity and report seismic activities on the Hanford Site.
- HMESC shall provide seismic information to Hanford Site contractors upon request.
- Hanford Site contractors shall request and provide requirements for services when necessary.

Usage-Based Services

N/A

Direct-Funded Service

Service scope as defined above.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
27	Hanford Environmental Oversight (HEO)	Information	Direct-Funded	Interface	Provide service to site contractors	Deliver input to HMESC	Deliver input to HMESC	Deliver input to HMESC	Deliver input to HMESC

Service Description

HEO provides program management, coordination and integration of Public Safety and Resource Protection (PSRP) functions. HEO also provides technical and administrative support to DOE associated with the PSRP program including Natural Resource Trustee activities.

- HMESC shall provide annual updates of the Hanford Site National Environmental Policy Act (NEPA) Characterization Report.
- Hanford Site contractors shall provide to HMESC appropriate environmental data for its facility and operable units to support Hanford Site
 assessments and preparation of the Hanford Site NEPA Characterization Report.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
28	Meteorological and Climatological Services	Information / Service	Combination of Usage-Based and Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC			

Service Description

The Hanford Meteorological Monitoring System includes 30 monitoring stations on the Hanford Site and provides accurate and timely weather information that enable safe conduct of activities and emergency response.

- HMESC shall provide all standard, weather-related information for Hanford Site contractors, providing detailed around-the-clock, easily retrieved and understood, real time meteorological data. This includes forecasts, heat indices, historical information, etc.
- HMESC shall maintain and operate the Hanford Meteorological Monitoring system. HMESC may be requested to provide special-use information by Site contractors.

Usage-Based Services

Special-use information requested by Site contractors

Direct-Funded Services

HMESC bears the cost burden of program administration, Hanford Site contractors shall request and provide requirements for service.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
29	Environmental Surveillance	Information / Service	Combination of Usage-Based and Direct-Funded	Interface	Receive input from and provide information to site contractors	Receive information from and provide input to HMESC	Receive information from and provide input to HMESC	Receive information from and provide input to HMESC	Receive information from and provide input to HMESC as applicable

Service Description

Environmental Surveillance consists of far-field multimedia environmental monitoring to measure the concentration of radionuclides and chemicals in environmental media and assess the integrated effects of these materials on the environment and the public.

- HMESC shall assess impacts and risks of contaminants on human health in order to prepare the annual Hanford Site Environmental Report and the Hanford Site Environmental Surveillance Master Sampling Schedule; and align the surface environmental surveillance with the needs of the environmental clean-up, restoration, and assessment activities at the Hanford Site.
- HMESC shall assess impacts and risks of Hanford contaminants on human health and the environment in support of Hanford cleanup activities as requested. Data and analysis shall be made available to the Hanford risk assessment activities.
- Hanford Site contractors shall provide appropriate input to support HMESC preparation of the annual Hanford Site Environmental Report and Hanford Site Environmental Surveillance Master Sampling Schedule.

Usage-Based Services

Hanford Site contractors bear request for services costs.

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors /users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
30	Ecological Monitoring and Compliance – Site Wide	Information / Service	Combination of Usage-Based and Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC as applicable			

Service Description

Ecological Monitoring and Compliance is to achieve compliance with ecological resource-related legal and regulatory requirements; Biota is monitored to access the abundance, vigor, or condition, and distribution on the Hanford Site.

HMESC shall:

- Assess the impacts to biological resources from Hanford Site operations and legacy contaminants to the environment and monitor the abundance, vigor, and distribution of plant and animal populations on the Hanford Site. This includes baseline surveys of protected biological resources, species, and habitats within key areas of the Hanford Site where the majority of routine operations and clean-up are conducted.
- Conduct ecological compliance reviews for Hanford Site contractors.
- Ecological reviews that are required to be conducted outside the Hanford alternate work schedule will not charge overtime to OHC projects.

Hanford Site contractors shall:

- Allow access to the Ecological Monitoring and Compliance activity for the purpose of collecting information and samples.
- Provide ecological information to the HMESC from their sampling activities such as CERCLA/RCRA risk assessments.

Usage-Based Services

Ecological reviews are a usage-based service.

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
31	Cultural and Historic Resource Program	Information / Service	Combination of Direct-Funded and Usage-Based	Service - Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC as applicable			

Service Description

The Cultural and Historic Resource Program administers the program for protecting Hanford Site cultural and historic resources, and documents and addresses any real or potential Site-wide issues and their impacts; and assures compliance with associated laws, DOE directives, and legally-binding agreements.

- HMESC shall monitor and support the resource protection activities of Hanford Site contractors; coordinate surveys performed to
 document the occurrence of protected resources; evaluate and document impacts to protected resources; perform NHPA Section 106
 Reviews for Hanford Site contractors; maintain, establish procedures for and manage Hanford Site cultural and historic resource site files
 (hard copy and electronic) and associated compliance project files for all such work that occurs at the Hanford Site; and curate files and
 artifacts in accordance with 36 CFR 79.
- Hanford Site contractors shall provide information to the HMESC necessary to perform NHPA Section 106 Reviews for their scope of
 work, and provide to HMESC information and materials to support HMESC execution of the Comprehensive Land Use Plan's (CLUP)
 Cultural & Historic Resource Program Plan. In particular, mission contractors (who meet 36 CFR 61 standards and guidelines) shall
 utilize the HMESC project records and files for background research.

Usage-Based Services

Cultural reviews are a usage-based service. Hanford Site contractors bear request for services costs.

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
32	Radiological Site Services (RSS)	Information / Service	Usage-Based	Mandatory	Provide service to site contractors	Receive service from HMESC	Receive service from HMESC	Receive service from HMESC	Receive service from HMESC

Service Description

Radiological Site Services (RSS) is a documented set of comprehensive and integrated radiological support programs which provide the technical support, dosimetry, data, and records necessary to demonstrate compliance with required radiological monitoring and to verify the adequacy of Site radiological control programs in protecting the health and safety of workers, the public, and the environment. The RSS includes the Hanford External Dosimetry Program (HEDP), the Hanford Internal Dosimetry Program (HIDP), the Hanford Radiological Instrumentation Program (HRIP), and the Hanford Radiological Records Program (HRRP).

HMESC shall provide:

- DOELAP accredited external dosimetry services, including technical support, documentation, and dosimeter preparation and processing, based on the types and quantities of external dosimetry required by all key customers.
- DOELAP accredited internal dosimetry services, including technical support, documentation, and analyses, based on the types and quantities of internal dosimetry required by all key customers.
- Calibration, maintenance, and repair services as defined in ANSI 323-1978 for a broad range of portable and semi-portable radiological
 instrumentation, including technical support and documentation, based on the types and quantities of portable and semi-portable
 radiological instrumentation calibration, maintenance, and repair services required by all key customers.
- Services to maintain, manage, and procure parts or replacements for the existing Hanford Site pool of radiological instruments, including developing processes for necessary replacement, as required by all key customers.
- Performance testing as defined in ANSI 323A-1997, or other standards as requested, to verify instruments continue to meet operational requirements.
- Management and preservation of current and former radiation monitoring records for DOE (and predecessor agencies) employees,
 Hanford contractors, sub-contractors, and visitors, including records of existing and past Hanford Site radiation dosimetry policies and practices.

On an as-requested basis, HMESC will provide dosimetry and bio-assay scheduling, dosimeter distribution, and other services commonly associated with "Dosimetry Operations." These services will be fully defined in the SOW and agreed upon by the requesting party and HMESC.

Hanford Site contractors shall request, and provide requirements for, service.

Usage-Based Services

Service as described above.

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
33	**Discontinued** Analytical Services (Chemical and Low-Level Radiological Analysis)								

**All services discontinued as of September 30, 2014.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
34	Biological Controls	Service	Combination of Usage-Based and Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC as applicable			

Service Description

Biological Controls is a service to control noxious weeds, industrial weeds, other vegetation, and animal pests. The program controls vegetation on approximately 2,000 acres, traps and removes animals, and eliminates insect infestations.

- HMESC shall provide a Hanford Site-wide biological control program.
- Hanford Site contractors shall request support as needed.
- Hanford Site contractors shall provide facility support resources to support HMESC-managed vegetation control, as required in Radiologically Controlled Areas defined in 10 CFR 835.

Usage-Based Services

Hanford Site contractors may request additional services beyond direct funded basic service as a usage-based service

Direct-Funded Services

Basic service funded through HMESC; provided at no cost to Hanford Site contractors.

Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
35	Crane and Rigging	Service	Usage-Based	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	N/A	Receive service from and provide input to HMESC as applicable (Optional for PNNL)

Service Description

The Crane and Rigging is a centralized pool of equipment and manpower for the Hanford Site. The HMESC shall:

- Provide a mobile crane pool, a regulated and non-regulated guzzler; coordinate rental and movement of cranes, preventative maintenance inspections and scheduling of necessary repairs; assemble, erect, and dissemble scaffolding and supervises crane crews.
- Manage, and schedule operations involving movable cranes and Crane and Rigging services.
- Maintain and operate cranes, rigging equipment and cable fabrication equipment.
- Chair the Site Hoisting and Rigging Committee.
- Maintain the Hanford Site Hoisting and Rigging Manual (HSHRM) and Hanford Site Hoisting and Rigging intranet web site
- Hanford Site contractors shall request and provide requirements for service.

Usage-Based Services

Service as described above.

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
36	Facility Services	Service	Usage-Based	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive (limited) service from and provide input to HMESC	N/A	Receive service from and provide input to HMESC as applicable (N/A for PNNL)

Service Description

Facility Services is a central maintenance function for non-radiological facilities.

- HMESC shall provide management and administrative oversight for all requested facility activities, including planning and directing the work. HMESC shall provide for the following facility services in support of the Hanford Site projects and contractors: facility painting, sign painting, carpentry, refrigerated equipment service, insulation, pipefitting, electrical, sheet metal, instrumentation, cement finishing, glazier work, custodial, locksmith, movers, equipment calibration, and HVAC maintenance and repair.
- CPCC and other Site users shall request and provide requirements for service.
- TOC and 222-S Lab shall only receive Refrigerated Equipment Service, custodial service, and Movers Service from and provide input to HMESC.

Usage-Based Services

Service as described above.

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
37	Motor Carrier Services	Service	Usage-Based	Mandatory	Provide service to site contractors	Receive service from HMESC	Receive service from HMESC	N/A	Receive service from and provide input to HMESC as applicable

Service Description

Motor Carrier Services provides a centralized pool of vehicles and drivers for the on-site or local transportation of freight including hazardous material at the Hanford Site, including radioactive materials and radioactive/mixed waste.

- HMESC shall:
- Manage, schedule, and conduct motor carrier services.
- Maintain and operate a centralized pool of vehicles and drivers for the on-site and limited local transportation of freight including hazardous and radioactive materials at the Hanford Site.
- Act as the Hanford Site motor carrier similar to a commercial motor carrier.
- Provide compressed gas shipments.
- Pick up at local vendors as directed by their customers.
- The Hanford Site contractor will prepare freight for shipment (packaging the freight) and provided associated documentation or direct a
 pick up of freight from a particular Site contractor or vendor.
- The preferred method for shipment of freight to other DOE site or to commercial vendor(s) is using a commercial motor carrier.
- Upon mutual agreement, the Contractor may provide a limited number of specialized vehicles to Other Hanford Site Contractors to support the efficient management of resources. Any vehicles provided by the HMESC will remain in the HMESC Fleet Maintenance Programs.

- Hanford Site contractors who are customers of this service prepare the waste for transport including shipper/receiver agreement documents, transportation documents for packaging, transportation and receipt by the receiving facility.
- Services are excluded for the Environmental Restoration Disposal Facility (ERDF) and the Integrated Disposal Facility (IDF) operations.

Usage-Based Services

Service as described above.

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
38	Fleet Services	Service	Usage-Based	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	N/A	Receive service from and provide input to HMESC as applicable

Service Description

Fleet Services administers and manages a fleet of motorized vehicles and equipment including, but not limited to sedans, pickups, vans, busses, ambulances, tractors, flatbeds, dump trucks, tool vans, utility maintenance vans, cab and chassis, trailers, forklifts, cranes, generators, compressors, excavators, frontend loaders, dozers, wreckers, and fuel tankers.

- HMESC shall provide management and coordination, statistical usage tracking, and reporting on GSA-leased vehicles and DOE-owned vehicles/equipment; perform vehicle and equipment repair and modification services as required (e.g., in the 200 Area); and perform record-keeping, vehicle assignment, ensuring vehicle utilization, and excess/disposal of fleet vehicles and parts. Some vehicles are designated as "regulated" due to contamination and are required to be serviced within radiologically-controlled areas.
- HMESC shall provide and execute the DOE approval of equipment/vehicle procurements when necessary.
- Hanford Site contractors shall request and provide requirements for service and those using Fleet Services shall provide report input such as the Transportation Management Scorecard.
- Vehicle maintenance services, including inventory of or access to parts normally used for routine maintenance.
- Routine preventive maintenance and inspections in accordance with manufacturer specifications, GSA schedules, and OSHA safety regulations.
- Vehicle and equipment corrective maintenance, as required to maintain performance and air quality standards.
- Performance of GSA non-reimbursable services, such as in-the-field service calls (including towing).
- Major component repair and reconstruction of failed major operating and drive train components.
- Auto body, glass and upholstery repair services.

- Performance of customer-specified non-maintenance mechanical support, vehicle and equipment modifications, auxiliary equipment installation and transfer, accident damage repair, and special fabrication services.
- Purchase and distribution of bulk fuel to heavy equipment located in the field.
- Management of the process for the acquisition, control, assignment, and disposal of DOE fleet equipment and GSA vehicles and associated property, which includes general and special purpose equipment.
- Administration of the GSA lease.
- Services are excluded for the Environmental Restoration Disposal Facility (ERDF) and the Integrated Disposal Facility (IDF) operations.

Usage-Based Services

Services as described above.

<u>Direct-Funded Services</u>

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
39	Railroad Services	Physical / Service	Usage-Based	Optional	Coordinate service	Request service from HMESC	Request service from HMESC	Request service from HMESC	Request service from HMESC

Service Description

The Hanford railroad system consists of approximately 40 miles of Class II track and one signal crossing between Horn Rapids Road and the 200W Area.

- HMESC determines requirements for future use on the Hanford Site and coordinates with Hanford Site contractors, projects, and off-Site entities prior to and during any on-site rail movements, including placement of "flaggers" at necessary intersections, taking proper security actions, and making Hanford Site notifications.
- Upon DOE direction, HMESC shall maintain and operate the rail system on the Hanford Site.
- Hanford Site contractors shall request and provide requirements for service to the HMESC.

Usage-Based Services

Service scope as defined above

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
40	Roads & Grounds	Service	Combination of Usage-Based and Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC per ICD 12 - Roads	Receive service from and provide input to HMESC (except PNNL off Hanford Site)

Service Description

Roads and Grounds consist of road maintenance, 24/7 snow removal, traffic management, and common grounds maintenance service for the Hanford Site.

Usage-Based Services

Hanford Site contractors may request additional services for facility specific services, such as, snow removal on sidewalks.

Direct-Funded Services

- HMESC shall maintain primary and secondary Hanford Site roadways, to include patching/paving, striping, and other services; perform maintenance of common grounds; and make recommendations to restrict access and make the appropriate notifications of restricted access or closure to DOE and other Hanford Site contractors in the event that roads are unsafe for travel. HMESC shall remove snow at primary and secondary roads and at designated facilities, parking lots, and walkways (per the Hanford Snow Removal Plan).
- Maintain the common grounds to ensure public/worker safety and environmental integrity within the 200, 300, and 600 Areas. Activities
 in this area include perimeter fence/sign maintenance at the Site boundaries; lawn and landscape care; annual inspection and
 maintenance of gravel pits; general area cleanup; sweeping sidewalks; washing buildings; sweeping general purpose facility parking lots
 and repairing bumper blocks.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
41	Electrical Transmission, Distribution, & Energy Management	Physical / Service	Combination of Usage-Based and Direct-Funded	Mandatory	Provide service	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC per ICD 11 - Electricity	Receive service from and provide input to HMESC

Service Description

Electrical Transmission, Distribution, & Energy Management is the management function of the high voltage electrical utility consisting of a system for providing power to the facilities at the Hanford Site.

- HMESC externally supplies electrical power to Hanford Site contractors.
- HMESC shall coordinate with other Hanford Site contractors to obtain the following:
 - Energy cost and consumption data for the Annual Energy Conservation Performance Report.
 - Energy cost and consumption data for the quarterly Hanford Site energy cost and consumption date entry to EMS4 database.
 - Facility shut down constraints and impacts due to fuel reductions for the Emergency Conservation Plan.
 - Facility electrical load information for the annual electrical load forecast.
 - Other facility electrical or energy information, as needed.
- Hanford Site contractors shall provide input for EMS4 database, annual Energy Conservation Performance Report, Emergency Conservation Plan, and annual electrical load forecast.
- Hanford Site contractors may enter into a service-provider relationship with the HMESC and/or other utility providers for the operation, maintenance, and/or closure of all or part of their internal utility systems.

 Hanford Site contractors shall protect Hanford Site systems against disruption and damage during performance of work and support Hanford Site utility operations, maintenance, and closure of a service where appropriate.

Notes:

• The interface point between the HMESC electrical distribution system and the Hanford Site contractors' facilities electrical system is routinely the connection at the secondary side of the building service transformer (HMESC also owns the electrical meters) However, there may be some facilities where the systems interface is located at a different connection point. The interface points are identified on the electrical utility switching system diagram drawings.

Usage-Based Services

Direct, mission-related upgrade projects are sub-contracted by HMESC and paid by the requesting Hanford Site contractor.

Direct-Funded Services

Basic service funded through HMESC; provided at no cost to Hanford Site contractors

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
42	Water System	Physical / Service	Combination of Usage-Based and Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC per ICD 01 – Raw Water and ICD 02 – Potable Water	Receive service from and provide input to HMESC

Service Description

The Water System function is a water utility service (the geographic areas to be served are the 100B/C, 200, and 600 Areas).

- HMESC shall manage the water system in accordance with agreements negotiated with the Hanford Site contractor being served and in
 accordance with guidance documents cited in state regulations for water systems; and maintain the existing Water System Master Plan.
 The Plan shall document a strategy for managing repairs, life extensions, replacements, and deactivations for facilities and equipment for
 the water systems within the scope of this contract over a ten year planning horizon.
- HMESC shall provide a "purveyor" (per the Washington Administrative Code and other state regulations) for HMESC -managed water systems.
- HMESC shall be responsible for all aspects of the water distribution system only up to and including the first off-valve or demarcation
 point outside the customer's facility or complex of facilities. The customer or facility maintains all responsibility for lines downstream of
 this agreed-upon point. On side-by-side multiple valve isolations and backflow assemblies, the facility assumes responsibility from the
 discharge side of the downstream isolation valve. For WTP, the demarcation point is the premise isolation backflow prevention at the
 fence line.
- Interface agreements shall be created with customer(s), if needed, to define demarcation points.
- HMESC shall perform, as requested, backflow preventer testing, water system contaminant monitoring management, and pipeline sanitization for other Hanford Site contractors (e.g., water systems outside of HMESC):

- Hanford Site contractors shall input to the Water System Master Plan and negotiate agreements for water utility service.
- CPCC shall identify priority water line upgrades which would prevent further ground water degradation; HMESC shall perform priority water line upgrades to prevent further ground water degradation.

Notes:

- The 100K Area and 400 Area Water Systems will be operated and maintained by the CPCC.
- The 300 Area Water System will be operated and maintained by PNNL, by agreement between DOE-RL and Pacific Northwest Site Office (PNSO).

Usage-Based Services

Direct, mission-related upgrade projects are paid for by the Site contractor requiring the upgrade. For water systems outside of the HMESC, water system contaminant monitoring management is a usage-based service reimbursed by the user. Water permits for Hanford Site contractors' new facilities is a usage-based service.

Direct-Funded Services

Hanford Site-wide water upgrades and Basic Service are funded through HMESC; provided at no cost to site contractors.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
43	Sewer Systems	Physical Service	Combination of Usage-Based and Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Optional	Receive service from and provide input to HMESC

Service Description

- Sewer system operations provide sewer pumper truck services and collection of sewage through piping for treatment and disposal in subsurface soil absorption systems, as well as the 200W Lagoon. The geographic areas to be served are the 100B/C, 200, and 600 Areas. HMESC shall operate the Hanford Site sanitary sewer systems, including compliance sampling; maintenance of support structures, systems, and components; and performance of sewer administration duties in accordance with the State of Washington sanitary sewer regulations.
- As per the definition in WAC 246-272B-01100(6): "Building Sewer' means that part of the horizontal piping of a drainage system extending from the building drain, which collects sewage from all the drainage pipes inside a building, to an [on-site sewage system] OSS. It begins two feet outside the building wall and conveys sewage from the building drain to the remaining portions of the OSS." Accordingly, the sanitary sewer system interface point will begin at the building sewer, two feet outside the building wall.
- HMESC shall update the existing Sewer System Master Plan. The Plan shall document a strategy for managing repairs, life extensions, replacements, and deactivations for facilities and equipment for the sewer systems within the scope of this contract over a ten year planning horizon and shall be updated every two (2) years.
- Hanford Site contractors shall provide input to the Sewer System Master Plan.
- Legacy facilities that are returned to service will be treated as a base, unless special circumstances require facility upgrades.
 Notes:
- The 100K Area, 200 Area ERDF, and 400 Area sanitary sewer systems will be operated and maintained by the CPCC.
- The 300 Area sanitary sewer system will be operated and maintained by PNNL, by agreement between DOE-RL and PNSO.

Usage-Based Services

Direct, mission-related upgrade projects are paid for by the Hanford Site contractor requiring the upgrade. Hanford Site contractors are responsible for facility-specific upgrades or new facilities sewer tie-ins under their control. Sewer permits for Hanford Site contractor new construction or project upgrades are a usage-based service.

Direct-Funded Services

Hanford Site-wide sewer upgrades and basic service are funded through HMESC; provided at no cost to Hanford Site contractors.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
44	Sanitary Waste Management and Disposal	Service	Combination of Usage-Based and Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Optional	Receive service from and provide input to HMESC (PNNL on Hanford Site)

Service Description

Sanitary Waste Management and Disposal function consists of waste collected from on-site dumpsters and transport to off-site landfills for disposal. HMESC shall pick-up, inspect, and dispose of non-radioactive, non-hazardous dry waste.

Hanford Site contractors shall request and provide requirements for service.

Usage-Based Services

Delivery and disposal of sanitary waste for roll off boxes is a usage-based service reimbursed by the user.

Direct-Funded Services

Management and oversight of Hanford sanitary, inert, and demolition waste landfills that are currently in operation or closed.

Delivery of and disposal of sanitary waste for dumpsters is provided at no cost to Hanford Site contractors.

	Site Business Management											
Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts			
45	Land-Use Planning and Management	Information / Service	Combination of Usage-Based and Direct-Funded	Mandatory (only for site selection and excavation permits)	Provide service		Request service from HMESC and provide input	Request service from HMESC and provide input per ICD 09 – Land for Siting	innit to			

Service Description

Land-Use Planning and Management consists of land-use planning (for the Hanford Site, in general and specific parcels) and management (including day-to-day implementation of the Comprehensive Land Use Plan [CLUP]).

- HMESC shall perform management of real property at the Hanford Site for DOE and coordinate the use of real property among Hanford Site contractors. HMESC shall perform a range of real property activities, such as conducting land-use planning for areas and specific parcels; conducting reviews and integrating land-use requests for all new facilities, infrastructure systems, land improvements, or change of land use; conducting land management activities, including day-to-day implementation of the CLUP; managing land use requirements and beneficial reuse of land; and conducting real estate activities in the out-grant and disposal of real property or interests therein.
- HMESC shall implement the CLUP as directed or interpreted by DOE. HMESC shall assess the need for updating the existing or developing new Area Management Plans and Resource Management Plans. In coordination with other Hanford Site contractors, the HMESC shall develop new plans and update existing plans where applicable.
- HMESC shall administer and manage the Site Selection and Excavation Permit process.
- HMESC shall monitor and assess the use of real property to assure compliance with restrictions, such as institutional controls.
- HMESC shall manage real property by reviewing property uses, reclassifying land use and facilities, investigating and characterizing land, monitor misuse of property or encroachments, identifying orphan or unknown land uses (e.g., non-pristine land, hazards, and waste sites), dispositioning non-permitted activities; and tracking and documenting land-use occurrences and activities.

- Hanford Site contractors shall support the land-use planning and management program as administered by the HMESC, including providing input to the Ten Year Site Plan (TYSP).
- HMESC shall develop the TYSP for the Hanford Site in coordination with other Site contractors.

Usage-Based Services

Excavation permits are provided as a usage-based service.

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
46	Long-term Stewardship	Information/ Service	Direct-Funded	Interface	Provide service and receive input from Site contractors	Deliver input to HMESC	Deliver input to HMESC	Deliver input to HMESC per ICD 09 – Land for Siting	N/A

Service Description

Long-term stewardship (LTS) includes all engineered and non-engineered institutional controls designed to contain or to prevent exposures to any potential residual contamination and waste, such as surveillance activities, record-keeping activities, inspections, groundwater monitoring, ongoing pump and treat activities, cap repair, maintenance of entombed buildings or facilities, maintenance of other barriers and containment structures, access control, and posting signs.

- Other prime contractors' role is to provide input to the HMESC by preparing an LTS Transition and Turnover Package (TTP) in accordance with the approved TTP template.
- HMESC shall provide for integrated planning of LTS for the entirety of the Hanford Site.
- HMESC shall prepare and maintain the Hanford Long-Term Stewardship Program Plan and Long-Term Surveillance and Maintenance Plans.
- HMESC shall coordinate with DOE-RL and Hanford Site contractors to compile the results of the annual Hanford Site-wide institutional
 controls assessment, and to conduct the Hanford Site-wide Comprehensive Environmental Response, Compensation, and Liability Act of
 1980 (CERCLA) 5-year reviews including comment response, interim documentation, and lessons learned.
- HMESC shall execute LTS for those portions of the Site assigned to the HMESC.
- Hanford Site contractors provide information for the Hanford Long-Term Stewardship Program Plan, Long-Term Stewardship
 Surveillance and Maintenance Plans, Annual NEPA Mitigation Action Plan Accomplishments, IC Plan, CERCLA 5-year reviews, Site
 Transition Plans, and annual site-wide institutional controls assessment.
- Hanford Site contractors will coordinate with the Hanford LTS Program Plan and provide input to the LTS Transition and Turnover Packages for a given parcel or segment of land to DOE and concurrently to the HMESC.

- Hanford Site contractors shall coordinate with the HMESC in development of CERCLA RODs including institutional controls to achieve consistency with the LTS Plan.
- Hanford Site contractors shall provide information for the Hanford Site Institutional Controls Plan (ICP) in accordance with Hanford Site CERCLA Records of Decision, Hanford Site RCRA post closure plans, and RCRA Permit Corrective Action Modifications.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. Cost for sites transferred (post-remediated) to HMESC are the responsibility of the HMESC. Hanford Site contractors bear internal implementation costs. Transition costs are the responsibility of the respective Hanford Site contractor.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
47	Facility Information Management System (FIMS)	Information	Direct-Funded	Interface	Receive input from Site contractors	Deliver input to HMESC	Deliver input to HMESC	Deliver input to HMESC	Deliver input to HMESC, as applicable

Service Description

DOE uses FIMS as the Complex-wide real property database for real property which provides an inventory and management tool that assists with planning and managing real property assets. FIMS is centrally managed at DOE Headquarters.

- HMESC shall manage the local effort for FIMS, meeting specific, annual reporting requirements and shall be responsible for collecting data from Hanford Site contractors in order to meet all mandatory reporting requirements.
- Hanford Site contractors deliver FIMS data and input to the Comprehensive Data/Site Management Strategy for spatial data.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
48	Hanford Site Structures List and Hanford Waste Site Assignment List	Information	Direct-Funded	Interface	Receive input from Site contractors	Deliver input to HMESC	Deliver input	Deliver input to HMESC per ICD 09 – Land for Siting	Deliver input

Service Description

The Hanford Site Structures List (List) and Hanford Site Assignment List Is the integrated, central inventory of Hanford facilities, structures, and waste sites. DOE Hanford uses these lists for integrated planning of baselines, cost-estimating, reporting DOE Gold Chart metrics, establishing assignment of responsibility for each facility and waste site to site contractors, support to FIMS, HSTD (Hanford Site Technical Data Base), Caretaker, and WIDS. This activity provides for maintenance, configuration control, and upgrading of the Lists.

- HMESC shall maintain the Hanford Site Structures List and Hanford Waste Site Assignment List serving as Administrator of the data, and is responsible for the platform for the data and Site-wide reporting.
- HMESC shall be responsible for the Site-wide configuration control process, and shall be responsible for collecting data from Hanford Site contractors in order to meet all mandatory reporting requirements.
- Proposed changes in assignment of facilities must be ratified by DOE.
 Hanford Site contractors deliver facilities, structures, and wastes site data and input to the Hanford Site Structures List and Hanford Waste Site Assignment List.

The Hanford Site contractors shall provide data and support to the HMESC, for the Hanford Sites contractor's facilities, waste sites and activities, to support maintenance of the Hanford Site Structures List and Hanford Waste Site Assignment List, Hanford Site contractors supplying information/ data are responsible for data quality.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
49	Condition Assessment Surveys (CAS)	Information	Direct-Funded	Interface	Receive input from Site contractors	Deliver input to HMESC	Deliver input to HMESC	Deliver input to HMESC	Deliver input to HMESC

Service Description

- CAS is used to assess the current material condition of its facilities, structures, systems, and equipment, and documents maintenance deficiencies. The assessment information for each assessed item is entered into the Condition Assessment Information System (CAIS), which provides an estimate of maintenance upgrade costs.
- HMESC shall manage the Hanford Site CAS/CAIS and provide for the administration of and execution of the CAS inspection program in order to accurately evaluate the existing state of specific facilities and identifying the deferred maintenance liability.
- HMESC shall coordinate all of the necessary inspection activities with the various site contractors that have eligible facilities for CAS inspections.
- HMESC shall make the CAS data available to the mission contractors.
- Hanford Site contractors shall enable access to HMESC for conducting on-site condition assessments.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
50	Geospatial Information Management	Information / Service	Combination of Usage-Based and Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC, as applicable

Service Description

Geospatial Information (relates the visualization, measurement, and analysis of features or phenomena that occur on the earth) supports the execution of requirements for worker health, land use planning, emergency response, etc., and is available to all Hanford Site contractors.

- HMESC shall develop and implement a comprehensive Hanford Geospatial Information Strategy and Implementation Plan (H-GIS) to
 ensure that all spatial data, information and documentation required for accomplishing the Hanford Site missions are captured, managed,
 and preserved.
- The HMESC shall provide general and business-specific Hanford Site maps, and act as a central geospatial clearinghouse to coordinate, capture, manage, and share geospatial information, including management of the Hanford Geographical Information System (HGIS).
- Hanford Site contractors deliver data to HMESC and input to Comprehensive Data/Site Management Strategy for spatial data.

Usage-Based Services

Hanford Site contractors may request business-specific map services as a usage-based service.

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
51	Property Systems/Acquisition & Materials Management	Information / Service	Combination of Usage-Based and Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Optional	Receive service from and provide input to HMESC, as applicable (PNNL DOE- EM owned equipment)

Service Description

Property Systems/Acquisition & Materials Management consists of Site-wide processes and procedures for centralized personal property management functions, such as recycling of precious metals and processing equipment that is no longer needed through the excess property system. Tracking of all DOE-owned, contractor-managed property (site-wide) is accomplished by means of decentralized data entry into the primary property management site-wide database (Sunflower Asset Management System [SAMS]). The Program also manages the centralized storage and staging of equipment and inventory through the use of various on-Site warehouses.

- HMESC shall provide a Site-wide Personal Property Systems and Materials Management Program that provides for tracking of accountable personal property, management of the property management database (Sunflower Asset Management System [SAMS], including providing Site-wide property management reports) and other related systems; central recycling; excess property dispositioning; and equipment transfers and loans.
- HMESC shall manage the (on-site) "stores" inventory warehouses. As required, the HMESC shall provide for delivery of inventory items to on-Site locations managed by other contractors. HMESC shall manage the supply chain, and evaluate Site-wide demand, usage trends, and programmatic requirements to act as lead in the reduction of existing line item site inventory to the lowest achievable levels.
- Hanford Site contractors deliver input to HMESC to include warehouse requirement needs, Property Information Data Systems (PIDS) data, and Contractor Balanced Scorecard Report data; and deliver property no longer required.

Usage-Based Services

Hanford Site contractors bear costs associated with delivery of excess materials to the central recycling and turn-over of excess property for disposition.

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
52	Hanford Site Pension Plan (HSPP) Hanford Site Savings Plan (HSSP) Hanford Employee Welfare Trust (HEWT)		Direct-Funded	Interface	Sponsor and receive input from Pension and Savings Committee	deliver input		Sponsor and deliver input to Pension and Savings Committee, HSPP only	PNNL and 222-S Lab - Sponsor and deliver input to Pension and Savings Committee

Service Description

- HMESC shall provide administration for the HSPP, HSSP, and HEWT.
- Hanford Site participating sponsors provide funding and deliver input to the Pension and Savings Committee whose decisions are provided to the HMESC.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. Contributions are allocated to the participating sponsors (Hanford Site contractors).

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
53	External Affairs	Information / Service	Direct-Funded	Interface	Provide service and receive support from Site contractors	Support HMESC	Support HMESC	Support HMESC	Support HMESC as applicable

Service Description

External Affairs includes assistance to DOE in its programs to communicate with outside entities for Hanford Site tours.

- HMESC shall work with DOE to strategize, plan, arrange logistics for and conduct or support Hanford Site tours and visits to projects/facilities by external parties as requested.
- HMESC shall provide transportation, badging coordination, working with other Site contractors, as needed, and providing guides/speakers, handouts, and refreshments, as appropriate or as requested.
- Hanford Site contractors shall provide technical staff support to HMESC when their facilities or waste sites are visited, to include guides/speakers, and handouts, when the tour involves respective Hanford Site contractor workscope.
- HMESC shall support DOE's management of the Hanford web site.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
54	External Reviews	Information	Direct-Funded	Interface	Receive support from Site contractors	Support HMESC	Support HMESC	Support HMESC	Support HMESC as applicable

Service Description

External Reviews provides support to DOE during audits and assessments from outside entities having oversight responsibility for DOE-RL and DOE-ORP and their contractors. These entities include the Defense Nuclear Facilities Safety Board, the Government Accountability Office, the DOE Office of Inspector General, and other governmental and Department of Energy oversight organizations, such as the Office of Health, Safety, and Security and Office of Enforcement.

- The HMESC shall support DOE-RL and DOE-ORP in hosting staff from auditing and assessing organizations, providing or coordinating required presentations, responding to information requests, and by providing required subject matter experts to respond to questions and information requests.
- Hanford Site contractors shall provide support to HMESC, as directed by DOE, in their External Reviews responsibilities.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
55	Courier Services	Service	Usage-Based	Optional	Provide service to site contractors	Receive service from HMESC	Receive service from HMESC	Receive service from HMESC	Receive service from HMESC, as applicable

Service Description

Courier services for the Hanford Site includes delivery and pickup of miscellaneous items, such as calibrated instruments, medical samples, equipment to be repaired, and essential (time-sensitive, critical) documents.

- HMESC shall provide transportation of priority or time-sensitive documents, medical samples or supplies (i.e., serum, blood samples, medical records, etc.), calibrated instruments, new or used office machines to and from repair facilities, and pickup and shredding of classified documents.
- Hanford Site contractors shall request and provide requirements for service.

Usage-Based Services

Service as described above.

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
56	Reproduction Services	Service	Usage-Based	Service - Large Volume: Mandatory. Convenience Copiers: Optional	Provide service to site contractors	Receive service from HMESC	Receive service from HMESC	Optional	Optional service (except DOE)

Service Description

Reproduction Services provides large volume document reproduction services and manages the convenience copier contract. Reproduction includes duplication of paper ,digitally transmitted documents, and engineering drawings; high volume copying services; color copies; forms reproduction; special bindings; tabbing, etc.

- HMESC shall provide printing, duplicating, binding, and reproduction services for the Hanford Site.
- Hanford Site contractors shall be responsible for identifying convenience copier locations to the HMESC and for costs incurred to utilize equipment provided through the HMESC copier contract.
- Hanford Site contractors shall request and provide requirements for service.

Usage-Based Services

Service as described above.

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
57	Multi-media Services	Service	Usage-Based	Optional Standards: Mandatory	Provide service to site contractors	Receive service from HMESC	Receive service from HMESC	Receive service from HMESC	Receive service from HMESC, as applicable

Service Description

Multi-media Services provides for the development, production, or acquisition of photos, videotapes, movies, audio productions, and other similar types of media.

HMESC multi-media organization shall be a centralized resource for the Hanford Site. The contractor shall establish the standards and written procedures that shall be used by all Hanford Site contractors and DOE to inventory photographs, videos, etc., identified as records. The standards/procedures shall direct that all photos, videos, etc. taken or acquired are indexed, and that the images/photos are merged into a Hanford Site archive or clearinghouse.

- HMESC shall conduct aerial photography of the Hanford Site (e.g., monthly), as directed by DOE.
- Whether using HMESC, or procuring outside services, Hanford Site contractors shall:
- Comply with Hanford Site multi-media standards.
- Provide multi-media records to the HMESC.

Usage-Based Services

Service as described above.

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
58	Mail Services	Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from HMESC	Receive service from HMESC	N/A	Receive service from HMESC, as applicable

Service Description

Mail Services for the Hanford Site includes delivery to major building/locations and relies on the serviced organization/company to deliver mail to individuals within their respective organizations.

- HMESC shall provide for basic mail services, including postage fees, pickup and delivery of interplant and U.S. Postal mail to customers. The work scope includes the pickup, routing and delivery of interplant mail (i.e., mail that does not leave the Hanford Site).
- HMESC shall distribute and pickup mail at defined locations in the contractor's facilities.
- Hanford Site contractors shall be responsible for mail distribution to contractor staff within their facility.

Usage-Based Services

N/A

Direct-Funded Services

Service as described above.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
59	Site Forms Management	Service	Direct-Funded	Optional	Provide service to site contractors	Receive service from HMESC	Receive service from HMESC	N/A	Receive service from HMESC (only DOE)

Service Description

Site Forms Management consists of a centralized and configuration-controlled forms management program that applies consistent design and utilizes the use of electronic forms in gathering of electronic record information to electronic records systems.

- HMESC shall administer the Hanford Site forms management system and process, and design electronic forms for interactive use, as
 well as, conventional hard copy forms. HMESC shall develop/design/revise/approve electronic and hard copy forms, eliminate obsolete
 or duplicate forms, maintain Site forms historical records, and maintain the system for centralized configuration management of site
 electronic and conventional hard copy forms. Development of forms shall be coordinated with the sponsor and its users.
- Hanford Site contractors may request and provide requirements for service.
- Hanford Site contractors are allowed to create and maintain unique forms relevant solely to their internal use, unless otherwise prohibited by Site policy.

Usage-Based Services

N/A

Direct-Funded Services

Service as described above.

	Information Resources / Content (Records) Management (IR/CM)											
Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts			
60	Strategic Planning & Program Management	Information	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from HMESC	Receive service from HMESC	Optional	Receive service from HMESC, as applicable			

Service Description

Strategic Planning & Program Management assesses the current IR/CM technology infrastructure, systems, applications, and business practices and provides recommendations for improving the scalability and reducing the life-costs over the current approach.

- HMESC shall develop a Computing and Telecommunications Strategic Plan.
- CPCC, TOC, and 222-S Lab shall provide input to the Computing, Telecommunications, and Content (Records) Management Strategic Plan.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
61	Telephone Services	Service	Usage-Based	Mandatory	Provide service to site contractors	Receive service from HMESC	Receive service from HMESC	Optional	Receive service from HMESC, as applicable

Service Description

Telephone Services function consist of the Hanford Site Telephone Exchange activities that encompass voice, data, special circuits, 9-1-1 support, and attendant/operator services to Hanford Site programs, projects, and support organizations.

- HMESC shall provide and maintain telecommunications capability and capacity sufficient to meet the needs of the Hanford site, encompassing those systems required to maintain data transmissions, including local, state, national, and international subscribers; data and network circuits; off-premise stations; telephone service to offsite offices occupied by Hanford Site end-users; alerting systems; and other miscellaneous voice and data circuits.
- Hanford Site contractors shall request and provide requirements for service.

Usage-Based Services

Service as described above.

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
62	Pager Services	Service	Usage-Based	Optional, except Emergency Response, which is Mandatory	Provide service to site contractors	Receive service from HMESC	Receive service from HMESC	N/A	Receive service from HMESC, as applicable

Service Description

Pager Services provides the electronic network and devices for Hanford Site paging.

- HMESC shall provide maintenance, operations and account administration of the Government-owned Hanford Site pager infrastructure and commercial pager services, including site, regional and national paging services.
- HMESC shall provide system designs, integration, maintenance, frequency management, associated engineering services, and support to manage regional, international, and nonstandard inventory for pager replacement parts.
- Hanford Site contractors may request and provide requirements for service.

Usage-Based Services

Service as described above

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
63	Radio Services for Crafts	Service	Usage-Based	Optional	Provide service to site contractors	Receive service from HMESC	Receive service from HMESC	N/A	Receive service from HMESC, as applicable

Service Description

Radio Services for Crafts provides radio communication infrastructure and licensing.

- HMESC shall provide engineering, maintenance and operations of non-emergency radio communication services, including associated infrastructure.
- HMESC shall manage radio spectrum licensing and design, engineering integration, operations and maintenance, installation, upgrade
 and required system calibration services, and registration of radio frequencies with the National Telecommunications and Information
 Administration.
- Hanford Site contractors shall request and provide requirements for service. If procuring radios, the contractor must comply with Hanford Site specifications.
- Equipment (radios, antennas, etc.) costs are the responsibility of the Hanford Site contractor.

Usage-Based Services

Service as described above.

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
64	Radio Services for Emergency Services	Service	Combination of Usage-Based and Direct-Funded	Mandatory	Provide service to site contractors	Receive service from HMESC	Receive service from HMESC	Optional	Receive service from HMESC, as applicable; 222-S Lab – Receive service from HMESC

Service Description

Radio Services for Emergency Services provides radio communication infrastructure and licensing.

- HMESC shall provide engineering, maintenance and operations of radio communication services, including two-way, fire dispatch, safety and emergency preparedness, security systems and infrastructure.
- HMESC shall manage radio spectrum licensing and design, engineering integration, operations and maintenance, installation, upgrade
 and required system calibration services, and registration of radio frequencies with the National Telecommunications and Information
 Administration.
- Hanford Site contractors shall:
 - o Follow Hanford Site radio frequency policy and use the HMESC for radio spectrum licensing; and
 - o Request and provide requirements for service.
- Consistent with Interface Number 88, TOC shall be responsible for coordinating, planning, and paying for the WTP contractor's requirements for infrastructure, utility, and service support from the HMESC and CPCC as identified in the J-3 Hanford Site Services and Interface Requirements Matrix except for Interface Numbers 5, "Physical Security Systems (Government Property)," and 64, "Radio Services for Emergency Services." WTP shall be responsible for coordinating, planning, and paying for usage-based services requested from Interface Numbers 5 and 64.

Usage-Based Services

Equipment (radios, antennas, etc.) costs are the responsibility of the Hanford Site contractor.

Direct-Funded Services

Service as described above.

Section J

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
65	Network Services	Service	Usage-Based	Mandatory	Provide service to site contractors	Receive service from HMESC	Receive service from HMESC	Optional	Optional, except DOE; 222-S Lab – Receive service from HMESC

Scope/Cost Allocation

Service Description

Network Services consist of the Hanford Local Area Network (HLAN) information infrastructure used by DOE-RL, DOE-ORP and Hanford Site contractors for intranet and internet services.

- HMESC shall operate and maintain the HLAN information/communication infrastructure including Application Hosting Services, Internet Support, Maintenance and Software License Management, Technology Support for Hardware and Software, network management and maintenance, desktop/user services, hardware maintenance, work station acquisition, redeployment and retirement, engineering and configuration, software distribution, and streaming video engineering services. The HMESC will also provide HLAN infrastructure maintenance.
- Hanford Site contractors shall request and provide requirements for service.

Usage-Based Services

Service as described above.

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
66	Information Systems	Service	Combination of Usage-Based and Direct-Funded	Mandatory	Provide service to site contractors	Receive service from HMESC	Receive service from HMESC	Optional	Optional except DOE; 222-S Lab – Receive service from HMESC

Service Description

Information Systems provide integrated business, technical, and project information systems including management and performance of steady state operations, maintenance, development and enhancements for Hanford Site data systems, and support to project and business functions.

- HMESC provides database management, video-teleconferencing (VTC) support services, software and systems engineering, system development, systems operations and maintenance (O&M), software testing, software configuration management, and application hosting services.
- Hanford Site contractors shall request and provide requirements for service.

Usage-Based Services

Hanford Site contractors may request additional services as a usage-based service.

Direct-Funded Services

Service as described above.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
67	Federal Records Inventory and Schedule Management	Information / Service	Combination of Usage-Based and Direct-Funded	Site-wide System – Mandatory Inventory & Scheduling Service - Optional	Provide service to and receive input from Site contractors	Deliver input to HMESC	Deliver input to HMESC	Optional	Deliver input to HMESC, PNNL (Optional for PNNL)

Service Description

Inventory and Schedule Management provides the Hanford Site-wide RIDS database for inventorying and scheduling all Federal records for HMESC and for designated contractors including those documenting the missions, programs, projects and all administrative functions. This work addresses all records (and non-records) originated or held by any of the covered contractors and includes records in all media, including electronic systems, databases, spreadsheets, microform, photo/negatives, hard copy paper, and all other formats and media.

- HMESC shall provide Hanford Site-wide RIDS database for Hanford Site Federal records.
- Other Hanford Site contractors shall provide RIDS database information.

Usage-Based Services

Optional service beyond the basic service described above.

Direct-Funded Services

Service as described above.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
68	Major Collection Management	Service	Combination of Usage-Based and Direct-Funded	Mandatory	Receive input from Site contractors	Deliver input to HMESC	Deliver input to HMESC	Deliver input to HMESC (Optional)	Deliver input to HMESC, PNNL (Optional for PNNL)

Service Description

Major Collection Management provides continued maintenance of significant collections of records. Examples of major collections include engineering drawings, photographs/negatives, videotapes, etc.

- HMESC shall ensure that records in identified collections are indexed, authenticated, metadata complete, and are accessible to those that have a business requirement.
- Hanford Site contractors shall meet the requirements of Major Collection Management as administered by the HMESC.

<u>Usage-Based Services</u>

- Controlled document distribution.
- Imaging of documents/records not included in the direct-funded services below.

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

Imaging, indexing, and verification of hard copy engineering documents/drawings as released through a document control/configuration system.

Maintenance of historical photography collection.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
69	Long-Term Records Storage	Service	Direct-Funded	Mandatory	Provide service to site contractors	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC	Receive service from and provide input to HMESC (Optional for WTP)	Receive service from and provide input to HMESC

Service Description

Long-Term Records Storage provides for physical storage of over 110,000 cubic feet of records in various hard copy medium (paper, photographs, video, tapes, etc.).

- HMESC shall provide program administration and long-term physical storage for paper and other hard copy media records and maintain information systems to manage that collection.
- Hanford Site contractors shall coordinate with HMESC for pickup of records.

Usage-Based Services

N/A

Direct-Funded Services

Service as described above.

	Portfolio Management											
Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts			
70	Hanford Portfolio Planning, Analysis & Performance Assessment (Integrated Hanford Life-Cycle Clean-up Plan; [Hanford] Programmatic Risk Management Plan; P6 schedules, and State of the Site briefing)	Information	Direct-Funded	Interface	Receive input from Site contractors and deliver input to DOE/OHCs	Deliver input to HMESC	Deliver input to HMESC	Deliver input to HMESC	Deliver input to HMESC, except PNNL and DOE			

Service Description

Hanford Portfolio Planning, Analysis & Performance Assessment consists of support to DOE-RL and DOE-ORP in maintaining the Integrated Hanford Life-Cycle Clean-up Plan that optimizes the mission life-cycle, enabling DOE to ensure cost and schedule efficiency while adequately anticipating and managing programmatic risk.

- HMESC shall perform Hanford Site portfolio integration, provide simulation and optimizing analysis tools, and coordinate and assist with integrated scheduling and performance evaluation.
- HMESC shall develop an Integration Issues Management Plan, provide Hanford Portfolio Planning, develop and maintain an Integrated Hanford Life-Cycle Clean-up Plan, and shall evaluate project and program performance against the Integrated Hanford Life-cycle Baseline.
- Hanford Site contractors shall provide information to the HMESC as necessary to complete the Hanford Portfolio Planning, Analysis & Performance Assessment activities.
- HMESC shall provide Hanford Life-Cycle Cleanup Baseline (HLCCB) information directly to DOE. It is DOE's decision to provide this information to the OHCs as required to facilitate project-specific mission integration and optimization tools/activities.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
71	Project Acquisition and Support	Information	Direct-Funded	Interface	Receive Critical Decision data and information from CPCC and TOC	Deliver data and info. to HMESC	Deliver data and info. to HMESC	N/A	N/A

Service Description

Project Acquisition and Support includes project initiation, design, construction, and/or procurement services to DOE and as an optional service to Hanford Site contractors.

- As directed by DOE, HMESC shall provide the means to enable DOE to perform its project owner management responsibilities, in the areas of planning and procurement actions for new projects, by supporting the Critical Decision (CD) 0 through CD-1/2 phase of new project life-cycles and, when requested, act as project lead in support of the CD-3 and 4 phase of new projects.
- Hanford Site contractors shall provide Critical Decision data and information to the HMESC as directed by DOE.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/Occ/Med/ Other Contracts
72	Independent Assessment and Analysis	Information	Direct-Funded	Interface	Receive input from Site contractors	Deliver input to HMESC	Deliver input to HMESC	Deliver input to HMESC	Deliver input to HMESC, except PNNL and DOE

Service Description

Independent Assessment and Analysis provides to DOE a capability for ensuring that work is being accomplished in accordance with ESH&Q requirements, or to accomplish special DOE studies and obtain recommendations on an as needed basis to resolve technical and regulatory issues.

- As directed by DOE, HMESC shall provide specialty technical expertise, on a task-order basis, for areas such as project management, project control, cost estimating and scheduling, environmental, safety, quality and health, quality assurance, criticality, nuclear safety, radiological control, fire protection, environmental protection, regulatory compliance, Integrated Safety Management System, etc., and conduct independent analyses and generate technical assessment reports as needed in these areas.
- Hanford Site contractors shall provide data and facility access to the HMESC as required by the Independent Assessment and Analysis
 activity.

Usage-Based Services

N/A

Direct-Funded Services

HMESC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

	CPCC SERVICES AND INTERFACE ACTIVITIES										
Solid and Liquid Waste Stabilization and Disposition											
Interface Number	Interface Title Cost Type Service Type HMESC CPCC TOC WTP										
73	Waste forecast system - Solid Waste Information and Tracking System (SWITS) and Solid Waste Integrated Forecast Technical Database (SWIFT)	Information	Direct-Funded	Interface	Provide data to CPCC	Receive data from Site contractors	Provide data to CPCC	Provide data to TOC	Provide data to CPCC, except DOE		

Service Description

Waste forecast system identifies future quantities of hazardous and radioactive waste generation for wastes managed by the contract.

- CPCC shall operate and maintain SWITS and SWIFT, and make available to other Site contractors.
- Hanford Site contractors shall provide waste generation data.

Usage-Based Services

N/A

Direct-Funded Services

CPCC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
74	Low Level Waste (LLW) and Mixed Low Level Waste (MLLW) Treatment, Storage, and Disposal	Physical	Combination of Usage-Based and Direct-Funded	Mandatory	N/A	Receive waste	Package and deliver to CPCC	Provide waste to TOC	Package and deliver to CPCC, except DOE

Service Description

This activity provides for LLW and MLLW Treatment, Storage, and Disposal.

- CPCC shall perform waste unloading, receipt, storage, and disposal of LLW and MLLW.
- Hanford Site contractors prepare waste, including packaging and treatment, and provide for waste transport.

Usage-Based Services

- Waste generators provide funding for packaging, treatment, transport (including unloading), storage, and disposal.
- TOC pays WTP waste disposal costs.

Direct-Funded Services

CPCC provides ready-to-serve capability.

	WIPP CORE CHARACTERIZATION PROJECT SERVICES AND INTERFACE ACTIVITIES											
	Transuranic Waste Characterization and Certification											
Interface Number	Interface Title	Interface Type	Cost Type	Service Type	WIPP Core Characterization Project (CCP)	HMESC	СРСС	тос	WTP	222-S Lab/OccMe d/Other Contracts		
75	Transuranic (TRU) and Transuranic Mixed Waste (TRUM) Packaging, Characterization, Certification, and Transportation	Information / Physical / Service	Combination of Usage-Based and Direct-Funded	Mandatory	Performs all Hanford TRU Waste Characterization and Certification activities.	N/A	Provides support to CCP characteriz ation and certificatio n activities. Receives waste from site users.	and deliver TRU to CPCC	N/A	Except DOE, package and deliver TRU to CPCC.		

Service Description

This activity provides for TRU and TRUM certification and loading waste for shipment to the Waste isolation Pilot Plant (WIPP).

- CPCC shall receive waste from contractors, provides interim storage if required, certifies waste for shipment, prepares payloads, and loads waste for shipment to WIPP or other DOE Sites.
- Hanford Site contractors shall conduct and budget for packaging (if required by WAC) and transporting waste to CPCC, and certify for WIPP and load waste for shipment to WIPP or other DOE Sites.
- CCP will provide, operate, and maintain RTR equipment, drum assay equipment, large box NDE/NDA equipment (if needed), and mobile loading equipment.
- CCP will operate and maintain the Hanford Super-HENC equipment for Standard Waste Box (SWB) assay.
- CCP will operate the Shipping and Receiving Bay within WRAP for TRUPACT loading. CPCC will operate and maintain the balance of the WRAP facility.
- CCP will provide the equipment for and perform head space gas sampling (HSGS) and analysis.

- CCP will establish and implement appropriate ESH&Q programs to support CCP activities.
- CPCC will perform initial (in-field) assay of retrieved waste, as necessary, to segregate TRU from non-TRU waste.
- CPCC will perform all waste repackaging activities.
- CPCC will provide facility records, packaging records, and other documents necessary for CCP to prepare waste certification packages.
- CPCC will provide the necessary public release clearances for CCP generated documents.
- CPCC will provide the infrastructure to support installation and operation of the CCP-provided RTR equipment, drum assay equipment, and mobile loading equipment.
- CPCC will provide the facility and infrastructure to support the installation and operation of the large box NDE/NDA equipment, if needed.
- CPCC will provide mobile crane and crane operator support for CCP mobile loading equipment.
- CPCC shall receive TRU waste from other site users and provide interim storage if required.
- CPCC will identify ESH&Q interfaces with CCP.
- Other Hanford Generators of TRU waste will provide TRU waste to CPCC that complies with WIPP waste acceptance criteria.

Usage-Based Services

• Waste generators provide funding to CPCC for the increment of work resulting from their waste.

Direct-Funded Services

CPCC provides ready-to-serve capability for TRU waste receipt, storage, and repackaging.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
76	Industrial and Radioactive Liquid Effluents Treatment and Disposal and Industrial Liquid Effluents Retention and Transfer		Direct-Funded	Mandatory	Deliver to TOC	Deliver to TOC	Provide services to Site Contractors	Deliver to TOC	Deliver to TOC

Service Description

This activity provides for treatment and disposal of industrial and radioactive liquid effluents.

- TOC shall operate the Effluent Treatment Facility (ETF), Liquid Effluent Retention Facility (LERF), 200 Area Treated Effluent Disposal Facility (TEDF), and the State Approved Land Disposal Site (SALDS) to receive, treat, store, and dispose of industrial and radioactive liquid effluents from Site contractors.
- Waste streams must comply with waste acceptance criteria and be within operational and radiological capacities.
- Waste streams that do not meet the waste acceptance criteria or operational/radiological capacities, and would require permit
 modifications, delisting activities, and/or facility modifications for acceptance, require DOE-ORP approval.

Usage-Based Services

N/A

Direct-Funded Services

Funded through TOC; provided at no cost to Hanford Site contractors. Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
77	**On Hold**	Dhariaal	Combination of Usage-Based and Direct-Funded	Mandatory	N/A	Receive from TOC	Transport to CPCC	Provide filled IHLW	N/A
	Immobilized High Level Waste (IHLW) Interim Storage	Physical						canisters for TOC transport	

Service Description

This activity provides for storage of IHLW.

- CPCC shall operate and maintain the Canister Storage Building.
- TOC and CPCC shall coordinate on modifications of the CSB for receipt of the IHLW.

Usage-Based Services

Modifications to CSB or construction of other storage capability funded by TOC.

Direct-Funded Services

CPCC funds ready to serve operations of the CSB.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
78	Integrated Disposal Facility (IDF) Waste Disposal	Physical	Combination of Usage-Based and Direct-Funded	Mandatory	N/A	Transport (ILAW only), Receive, and dispose	Deliver LLW and MLLW to CPCC Fund WTP UBS costs	Stage ILAW for CPCC transport Deliver LLW and MLLW to CPCC	N/A

Service Description

This activity provides for transport and disposal of ILAW and special handling waste services for RCRA and Non-CERCLA non-bulk LLW and MLLW.

- CPCC shall operate IDF.
- CPCC shall transport/receive/dispose of ILAW containers.
- CPCC shall own, inspect, and maintain the ILAW transporter system (i.e., tractors, trailers, and pallets).
- WTP shall stage ILAW containers in ILAW pallets on the transporter trailers for CPCC transport to IDF.
- CPCC shall receive/dispose of RCRA and Non-CERCLA Non-bulk LLW and MLLW.
- CPCC shall provide special handling waste services for RCRA and Non-CERCLA non bulk LLW and MLLW treatment, storage, and disposal, as agreed by IDF and the waste generator.
- OHCs shall request and provide requirements for service.
- TOC pays WTP Usage Based Service costs.

Usage-Based Services

Service	Service Type	Clarifications
Waste Treatment	Optional	Requested special handling waste services to meet IDF Waste Acceptance Criteria (WAC).

Waste Storage Pending Treatment or Disposal at IDF	Optional	Requested special handling waste services.
Waste Disposal	Mandatory	Requested special handling waste services.
ILAW Container incremental waste transport/receive/disposal needs beyond Direct-Funded ready-to-serve capability for maximum of 5 containers per calendar day averaged semi-monthly	Mandatory	Operational variance will cause variation in containers per day. IDF's operational capacity for ILAW receipt will range from 0 to 15 containers per operational day with a maximum of two consecutive days receiving 12 to 15 container per day. See direct-funded services below.
LLW and MLLW (non-ILAW container) incremental waste receipt, storage, and disposal needs beyond Direct-Funded single crew operations	Mandatory	See direct-funded services below.

Direct-Funded Services

CPCC provides ready-to-serve capability to transport/receive/dispose of 5 ILAW containers per calendar day averaged semi-monthly with a maximum of 1825 containers/year.

CPCC provides ready-to-serve capability to receive/dispose of LLW and MLLW packaged waste that, upon receipt is compliant with the IDF Waste Acceptance Criteria (WAC) and can be managed within a single crew operations. (2 packages/day, 4 days/week).

	Groundwater and Vadose Zone Project									
Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts	
79	Groundwater/Vadose Zone Integration	Information / Service	Direct-Funded	Mandatory	Deliver to CPCC	Receive from Site contractors	Deliver to CPCC	N/A	N/A	

Service Description

The Groundwater/Vadose Zone Integration activity maintains and controls site-wide data and models used for groundwater/vadose zone analysis and coordinates site-wide groundwater/vadose zone activities.

- CPCC shall conduct the groundwater/vadose zone integration project.
- Hanford Site contractors shall participate in CPCC periodic planning and coordination meetings; and deliver modeling and risk assessment information. Mission contractors shall provide comments on the annual update to the Integrated Plan and Schedule for all soil and groundwater work, and the annual Groundwater Monitoring Report.
- Hanford Site contractors shall supply groundwater analysis requirements and reporting of risk assessment data and analysis, input for the
 Fiscal Year Integrated Groundwater Monitoring Plan for the Hanford Site, comments on the Comprehensive Environmental Response,
 Compensation, and Liability Act of 1980 (CERCLA) Groundwater and Deep Vadose Zone Remediation Activity Progress Reports.
- Hanford Site contractors shall provide data/information to CPCC on self-performed drill and sample soil borings that yield additional vadose zone characterization data.

Usage-Based Services

N/A

Direct-Funded Services

CPCC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
80	Hanford Environmental Data Integration	Information Service	Direct-Funded	Mandatory and Interface	N/A	Receive from TOC and other site contractors	Deliver input to CPCC	N/A	Deliver input to CPCC, except DOE

Service Description

This activity provides for maintenance, configuration control, and upgrading of key Hanford Site environmental assessment databases.

The CPCC shall serve as Data Manager for the following information systems:

- Hanford Environmental Information System (HEIS);
- Sample Data Tracking (SDT) System;
- Hanford Well Information System (HWIS);
- Waste Information Data System (WIDS).

The Hanford Site contractors shall provide data and support to the CPCC, for the Hanford Sites contractor's facilities and activities, to support maintenance of the above listed Hanford-wide environmental databases. Hanford Site contractors supplying information/ data are responsible for data quality.

Usage-Based Services

N/A

Direct-Funded Services

CPCC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
81	Hanford Site Well Drilling and Decommissioning	Information	Direct-Funded	Interface	Coordinate with CPCC	Coordinate with TOC, HMESC, and other Site contractors	Coordinate with CPCC	N/A	Coordinate with CPCC

Service Description

This activity includes drilling and decommissioning of Hanford Site wells.

- CPCC shall coordinate with the mission contractors during the installation and maintenance of wells for the groundwater monitoring well network and maintain and implement the Hanford Site Well Decommissioning Plan.
- Hanford Site contractors shall provide input for the Hanford Site Well Decommissioning Plan.

Usage-Based Services

N/A

Direct-Funded Services

CPCC bears the cost burden of program administration. Hanford Site contractors bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
82	**Discontinued** Special Nuclear Fuel (SNF) Fragments Transportation								

**All services discontinued as of August 29, 2016.

	TOC SERVICES AND INTERFACE ACTIVITIES											
	Base Operations											
Interface Number	nterface Interface Title Interface Cost Type Service Type HMESC CPCC TOC WTP Lab/OccMed/											
83	Tank Farm Projects Double Shell Tank (DST) System Management	Information	Direct-Funded	Interface	N/A	N/A	Integrate with WTP	Deliver input to TOC	N/A: 222-S Lab – Integrate with TOC			

Service Description

DST System Management maintains acceptable waste feed specifications for future waste feed delivery to the WTP while also maximizing use of available DST space to facilitate single-shell tank waste retrieval and any in-tank treatment to preserve tank integrity and improve waste feed characteristics.

- TOC shall integrate with the WTP and 222-S contractors, develop the Integrated Waste Feed Delivery Plan, and the River Protection Project System Plan, and operate the DST system.
- WTP shall provide input for feed delivery integration.

Usage-Based Services

N/A

Direct-Funded Services

TOC bears the cost burden of program administration.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
84	Vent and Balance	Service	Usage-Based	Mandatory	Receive service from TOC	Receive service from TOC	Provide service to CPCC, 222- S Lab, and HMESC	Optional	N/A; 222-S Lab – Receive service from TOC

Service Description

Vent and Balance provides as a variable service, testing of ventilation and filters, and ventilation balance to maintain established flows and pressures on systems. Specifics include ventilation stack flow testing, fume hood flow testing, high efficiency particulate air (HEPA) filter vacuum testing/certification and HEPA filter efficiency testing.

- TOC shall perform cost-effective/efficient Vent and Balance services (primarily HEPA filter testing and replacement) for RPP facilities and for the balance of the Hanford Site.
- CPCC, HMESC, and 222-S Lab shall request and provide requirements for service.

Usage-Based Services

Service as described above.

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
85	**Discontinued** Analytical Laboratory Support (Landlord Services for 222-S Laboratory Complex)	Service	Direct-Funded	Mandatory	N/A	N/A	Provide service to LA&TS	N/A	N/A LA&TS receives service from TOC

**All services discontinued as of April 15, 2021.

Service Description

Analytical Services are performed by the Hanford 222-S Laboratory Analysis and Testing Services Contractor (LA&TS), a separate prime contractor to DOE-ORP, while laboratory facility operations and maintenance are performed by the contractor.

- TOC shall operate and maintain the 222-S Laboratory Complex to support analysis activities performed by the LA&TS.
- LA&TS will provide input and coordination to support operations.

Usage-Based Services

N/A

Direct-Funded Services

Funded through TOC; provided at no cost to Hanford Site contractors.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contractors
86	Integrated Analytical Planning	Information	Direct-Funded	Interface		Provide data to 222-S Lab			Provide service

Service Description

Analytical Integrated Planning provides integrated Site-wide analysis plans, data quality objectives, and process and analytical technology support to resolve chemistry, radiochemistry, and material science concerns.

- Interface with the OHCs to develop sample analysis rates, waste generation estimates, and plan and schedule analytical services to meet negotiated customers priorities.
- OHCs shall use integrated planning products to plan sample analysis expenditures.
- OHCs shall provide input to support sample analysis planning.
- Hanford Site contractors/users bear internal implementation costs.

Usage-Based Services

N/A

Direct-Funded Services

Administer Analytical Integrated Planning Program.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
87	**Discontinued** Tank Closure and Waste Management Environmental Impact Statement (EIS) and Record of Decision (ROD)	Information	Direct-Funded	Interface	_	_	Deliver input to DOE-ORP	N/A	N/A

**All services discontinued as of September 1, 2021 because of TC & WM ROD has been completed.

Service Description

Tank Closure and Waste Management EIS and ROD is a regulatory requirement supporting Hanford Site closure activities. DOE is currently preparing the Tank Closure and Waste Management (TC & WM) Environmental Impact Statement (EIS). The TC & WM EIS is evaluating options for managing and disposing of waste, supplemental treatment, tank closure and establishing final end states for the Fast Flux Test Facility (FFTF) at Hanford. These decisions are expected to be applied to the related programs after 2009.

- DOE-ORP will develop the Tank Closure and Waste Management EIS and ROD.
- Hanford Site contractors shall provide input to the Tank Closure and Waste Management EIS and ROD.

Usage-Based Services

N/A

Direct-Funded Services

Hanford Site contractors bear the cost of their respective resources for this activity.

	Waste Treatment and Immobilization Plant Support											
Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts			
88	WTP Support	Information / Service	Direct-Funded	Mandatory and Interface	Provide services to WTP	Provide services to WTP	Coordinate and provide services to WTP (except as noted below)	Receive service from and provide input to TOC	N/A			

Service Description

WTP interface provides support for WTP construction.

- HMESC, CPCC, and TOC will participate with WTP in the revision and approval of WTP Interface Control Documents (ICDs).
- TOC shall be responsible for coordinating, planning, and paying for the WTP contractor's requirements for infrastructure, utility, and service support from the HMESC and CPCC as identified in the J-3 Hanford Site Services and Interface Requirements Matrix except for Interface Numbers 5, "Physical Security Systems (Government Property)," and 64, "Radio Services for Emergency Services." WTP shall be responsible for coordinating, planning, and paying for usage-based services requested from Interface Numbers 5 and 64.
- WTP may elect to use TOC for Waste Management Services, Conduct of Operations support, and other services not otherwise covered by the J.3 Matrix.
- ICDs identify interface requirements, technical and service gaps, and document issues in order to support efficient and timely
 construction, startup, commissioning, and operation of WTP. ICDs do not represent contractual obligations between the executing
 parties or the government.
- WTP shall maintain WTP Interface Control Documents.

WTP ICDs include:

- ICD 1, Raw Water
- ICD 2, Potable Water

- ICD 3, Radioactive Solid Wastes
- ICD 5, Non-Radioactive, Non-Dangerous Liquid Effluents
- ICD 6, Radioactive Dangerous Liquid Effluents
- ICD 9, Land for Siting
- ICD 11, Electricity
- ICD 12, Roads
- ICD 14, Immobilized High-Level Waste
- ICD 15, Immobilized Low-Activity Waste
- ICD 19, Low-Activity Waste Feed
- ICD 23, Waste Treatability Samples
- ICD 28, Pit 30 Aggregate Supply for Construction
- ICD 29, Waste Sodium
- IDC 30, Direct LAW Feed
- ICD 31, DFLAW Effluent Returns to Double-Shell Tanks

Usage-Based Services

N/A

Direct-Funded Services

Hanford Site contractors bear internal costs associated with WTP ICD participation, review and approval.

	OTHER DOE DIRECT-CONTRACTED SERVICES											
Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts			
89	Janitorial Service	Service	General and Administrative (G&A) cost for each contract.	Optional	Receive service	Receive service	Receive service	N/A	Receive service			

Service Description

The Janitorial Service Contractor provides janitorial services for buildings 661A, 662, 662A, 664, and 669 located in the 600 Area; buildings 3212 and 3220 located in the 300 Area; and Mobile Offices as identified by DOE. Services include light cleaning, high cleaning, and special services, as needed.

Usage-Based Services

N/A

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
90	Laundry Service	Service	Fee for service.	Optional	Receive service	Receive service	Receive service	Optional	Receive service

Service Description

The Laundry Service Contractor provides for commercial laundry and decontamination services for government-owned protective clothing, non-regulated items, and regulated face pieces. This service includes periodic batch pick-up and drop-off at site locations.

Usage-Based Services

N/A

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
91	Occupational Medicine Service	Service	Fee for Service	Mandatory	Receive service	Receive service	Receive service	Receive service – chelation therapy and Be monitoring only	OccMed – Provides service to site contractors; 222-S Lab – receive service

Service Description

The Occupational Medical Services Contractor (OccMed), under a separate prime contract to DOE-RL, provides Occupational Medical Services through health risk management and Occupational Medical Services to personnel at Hanford. The contractor has the lead to coordinate Health Risk Management program teams with the Site in identifying and analyzing the hazards that Hanford personnel face in the work environment and brings an awareness of health and safety issues to DOE, Hanford Site contractors, and others.

The contractor provides the following, but is not limited to these types of services: medical monitoring and qualification examinations, including the controlled substances/alcohol testing program (mandatory use); diagnosis of occupational injury or illness; monitored care; legacy health issues; employee counseling and health promotion; occupational health process improvement; human reliability testing; records management; emergency and disaster preparedness; health care cost management; field/facility visits; case management; records and data extraction; chelation therapy, other occupational medicine services; reporting; and supporting transition.

• WTP receives only the following services: Beryllium voluntary medical surveillance program and radiation exposure injuries (chelation therapy).

Usage-Based Services

N/A

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
92	Personnel Security Services	Information / Service	Direct-Funded by DOE	Mandatory	Receive service from and provide input to PSSC	Receive service from and provide input to PSSC	Receive service from and provide input to PSSC	N/A	Receive service from and provide input to PSSC (N/A for PNNL) PSSC – Provide service to site contractors

Service Description

The Personal Services Security Contractor (PSSC) currently provides technical and administrative support expertise for the implementation of the DOE Personnel Security Program, including clearance and special access processing, adjudication of investigative reports, human reliability programs, and other personnel security related programs. The contractor also provides transcription services, screening and processing classified mail, operation of the vault, visitor control and security education for both employees and visitors located in the Federal Office Building (FOB), and management of several personnel security-related databases.

Usage-Based Services

N/A

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
93	Research, development, and demonstration	Service	Usage-Based	Optional	Receive service	Receive service	Receive service	Receive service	Receive service PNNL - Provide service to site contractors

Service Description

PNNL is one of five Office of Science multi-program laboratories that conduct research and development activities. Some of the programs conducted at PNNL are part of the DOE Office of Science laboratory system and require no integration with the Hanford DOE Office of Environmental Management programs; however, many of the research and technology development programs have direct relevance to the Hanford cleanup mission. As applicable, the contractor is encouraged to utilize the scientific and technical capabilities available from PNNL and work directly with PNNL to maximize the benefit to Hanford from the National research and development program.

Usage-Based Services

Service as described above.

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
94	Sample Analysis (highly radioactive)	Service	Combination of Usage-Based and Direct-Funded	Mandatory	Receive services from 222-S Lab	Receive services from 222-S Lab	Receive services from 222-S Lab	N/A	222-S Lab - Provide services to TOC and CPCC

Service Description

Provide highly radioactive sample analysis in support of Hanford Site Projects. For Tank Farms - these samples originate from DST, SST, and Vadose samples that are not candidate for commercial laboratories (does not meet commercial lab licensing permit requirements). For CPCCo, these are samples deemed highly radioactive by the customer.

- Archive sample remainders at the request of the customer, maintain sample archive, documentation, tracking, and provide customers annual archive inventories.
- OHCs shall develop annual Service Level Agreements to forecast funding requirements.
- OHCs receiving sample analytical services are responsible for shipping and dispositioning of excess sample material.
- OHCs shall provide sample archive requests and final disposition scheduling for each archived sample.
- Hanford Site contractors/users bear internal implementation costs.
- OHCs receiving sample analysis services are responsible for sample delivery to 222-S Lab.

Usage-Based Services

Service	Service Type	Clarifications
Reconstitution of samples	Mandatory	Pertains to samples that have been previously sampled and archived.
Packaging	Mandatory	For onsite and offsite shipping of highly radioactive samples from the 222-S Lab.
Post analysis sample storage	Optional	Sample generators will be charged an annual storage fee for samples that are retained in archive.

	Sample disposition	Mandatory	Sample generators will be charged all disposition costs for excess	
	, ,	•	sample materials.	1
- 11				

Direct-Funded Services

• Receive and prepare samples, as described in the service description; record and track samples and related waste materials; perform chemical and radionuclide analyses using necessary quality control and quality assurance; report the results and archive sample remainders as required by the customer.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	CPCC	тос	WTP	222-S Lab/OccMed/ Other Contracts
95	**Discontinued as of 11/15/2021** Steam Services	Service	Direct-Funded	Mandatory	Receive service	Receive service	Receive service	N/A	Receive service ESPC - Deliver service to site contractors

**All services discontinued as of November 15, 2021.

The ESPC for steam services will be discontinued as November 15, 2021. DOE-RL has provided contract direction to CPCC and HMESC, and it is anticipated that TOC will also receive contract direction to self-perform their individual company facility heating and/or process steam needs by this date. If HMESC and CPCC choose to use the existing natural gas fuel source in the 300 Area, as provided by Cascade Natural Gas, HMESC and CPCC will need to enter into agreements with PNNL for natural gas delivery to their facilities. PNSO has provided PNNL with contract direction to assume natural gas distribution inside the 300 Area fence line.

Service Description

The Energy Savings Performance Contractor (ESPC), under a separate prime contract, currently includes steam service to support heating and other operations at the Site and air compressors for twenty 300 Area facilities. The ESPC can also propose additional energy conservation measures. These may include, but are not limited to, lighting system upgrades; pumping system upgrades; automation; heating, ventilation, and air conditioning upgrade; and addition of utility monitoring and control systems.

Usage-Based Services

N/A

Direct-Funded Services

TOC "advance" pay from its DOE funding allocations. HMESC & CPCC costs are funded by DOE-RL directly to the ESPC from PBS-40.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
96	Environmental Restoration Disposal Facility (ERDF) Waste Disposal	Physical	Usage-Based	Mandatory	Deliver to CPCC	Receive from Site contractors	Deliver to CPCC; Fund WTP UBS costs	Deliver to CPCC	Optional 222-S Lab deliver to CPCC

Service Description

The CPCC contractor shall perform transportation, treatment, storage, and disposal of CERCLA, RCRA LLW and Contact Handled/Remote Handled Mixed Low Level Waste (CH/RH-MLLW).

OHCs shall request and provide requirements for service.

TOC pays WTP Usage Based Service costs.

Usage-Based Services

Service	Service Type	Clarifications
Waste Disposal	Mandatory	Requested transportation and disposal services.
Waste Treatment	Optional	Requested special handling waste services.
Waste Storage	Optional	Requested special handling waste services.

Direct-Funded Services

N/A

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
97	Hanford Sitewide Transportation Safety Document	Information / Service	Direct-Funded	Mandatory	Receive service from and provide input to CPCC	Provide service to site contractors	Receive service from and provide input to CPCC	N/A	PNNL and 222-S Lab - Receive service from and provide input to CPCC

Service Description

CPCC shall assume ownership of the Hanford Sitewide Transportation Safety Document (TSD), effective with DOE-RL approval of DOE/RL-2001-36, Hanford Sitewide Transportation Safety Document, Revision 2, and is to perform maintenance of the TSD through the duration of the CPCC period of performance.

- CPCC shall act in the role of the TSD Configuration Manager (i.e., TSD Section 4.4). The responsibilities of the TSD Configuration Manager include:
 - Ensure notifications of potential inadequacies in the safety analyses are appropriately distributed to the contractor Transportation & Packaging (T&P) points-of-contact.
 - Ensure new Packaging Safety Documents and tiedowns are distributed to the contractor T&P points-of-contact.
 - Ensure unreviewed safety question for transportation determinations (USQTDs) are appropriately distributed to the contractor T&P point-of-contact. Maintain configuration control of the TSD.
 - Prepare, submit to DOE-RL for approval, and implement the TSD annual update.
 - Maintain the safety basis current as required by DOE O 460.1D (or current version shown in Attachment J.2) and 10 CFR 830.
 - Organize and conduct contractor interface meetings.
- CPCC shall also control and maintain the TSD Configuration Manager website to include all authorized Packaging Safety Documents, Special Packaging Authorization Shipment Evaluation Checklist, and tiedown/internal load securement plans.
- Affected Hanford Site contractors shall participate in the TSD annual update and perform to the responsibilities set forth in TSD Section 4.3.

• DOE will evaluate contractor/user input on the TSD annual update prior to approval. The TSD annual update will be approved by DOE.

Usage-Based Services

N/A

Direct-Funded Services

CPCC bears the cost burden of program administration. Hanford Site contractors/users bear internal implementation costs.

Interface Number	Interface Title	Interface Type	Cost Type	Service Type	HMESC	СРСС	тос	WTP	222-S Lab/OccMed/ Other Contracts
98	Sample Analytical Services	Service	Combination of Usage-Based and Direct-Funded	Optional	N/A	Receive services from 222-S Lab	Receive services from 222-S Lab	N/A	222-S Lab provide services to TOC and CPCC

Service Description

Provide sample analysis in support of Hanford Site Projects for other than highly radioactive samples.

- 222-S Lab will provide an annual on-site and off-site analyses cost comparison based on project requirements to the OHCs.
- OHCs shall develop annual Service Level Agreements upon which service fees will be based.
- OHCs will decide based on cost, schedule, technical requirements, and project needs if samples will be analyzed at the 222-S Lab or at an off-site laboratory.
- OHCs receiving sample analysis services are responsible for sample delivery.
- Hanford Site contractors/users bear internal implementation costs.

Receive samples, prepare samples, record and track samples and related waste materials; perform chemical and radionuclide analyses using necessary quality control and quality assurance; report the results.

Provide disposal services for samples with final disposition documentation, except as otherwise agreed.

Usage Based Services

Service Service Type		Clarifications					
Off-site sample analysis	Optional	For samples analyzed at offsite laboratories, sample generators will be charged for costs associated with offsite laboratory analysis, packaging, and sample management support if done through the 222-S Lab.					
Sample disposition	Optional	Sample generators will be charged all disposition costs for excess sample materials without a defined waste stream.					

Direct Funded Services

Provides services as described in service description.

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SECTION J – LIST OF ATTACHMENTS ATTACHMENT C GOVERNMENT-FURNISHED PROPERTY AND GOVERNMENT-FURNISHED EQUIPMENT

Government-Furnished Property and Government-Furnished Equipment as referenced in Section C.9, "Interface Control Documents."

SECTION J – LIST OF ATTACHMENTS ATTACHMENT D – SMALL BUSINESS SUBCONTRACTING PLAN

Attachment to CCN 290519

Attachment

Waste Treatment Plant Project
Small Business Subcontracting Plan

6 Pages

(including coversheet)

Waste Treatment Plant Project SMALL BUSINESS SUBCONTRACTING PLAN

1. Name of Prime Contractor:

Bechtel National, Inc. (BNI)

Address:

2435 Stevens Center Place Richland, WA 99354

2. Prime Contract Number:

DE-AC27-01RV14136

Total Estimated Contract Cost (TECC):

\$14,062,312,153

Contract Period of Performance:

12/11/2000 through 12/31/2022

Place of Performance:

Hanford Site, Richland, WA

Description of Contract Requirements:

Bechtel National, Inc. (BNI) is leading a project to design, build, and start up the world's largest complex of waste treatment facilities. The plant will use a process known as vitrification to immobilize some of the 56 million gallons of chemical and radioactive waste now stored in Hanford's 177 aging tanks. The Project team is divided into Engineering, Construction, Operations, and Business areas.

In execution of BNI's responsibilities under the contract for the Hanford Tank Waste Treatment and Immobilization Plant (WTP) Project, BNI will comply with Public Law 95-507, FAR 52.219-8, and FAR 52.219-9 to maximize the utilization of small business (SB) concerns for purchasing goods and services. In compliance with DOE Acquisition Letter 2005-06, dated 3/11/05, the subcontracting base excludes subcontracts involving performance outside of the United States and purchases from Bechtel Corporation and its affiliates. Data sources will be the Bechtel Procurement System (BPS), the B-Card System, and the Bechtel Accounts Payable System.

The following plan provides the WTP Project's Small Business Subcontracting Plan as a percent of the total planned subcontracting effort and the subcontracting effort available:

Total estimated dollars available for subcontracting:

\$5,624,924,861 (40% of TECC)

Category	Subcontracting Planned Dollar Amount	Percentage of Total Estimate Subcontracting Effort		
Total planned and available for subcontracting to SB concerns	\$2,272,469,643	40.4%		
Total planned and available for subcontracting to Small Disadvantaged Business (SDB) concerns (included in SB concern numbers)	\$196,872,370	3.5%		
Total planned and available for subcontracting to Woman-Owned SB (WOSB) concerns (included in SB concern numbers)	\$224,996,994	4.0%		
Total planned and available for subcontracting to Historically Underutilized Business Zone (HUBZone) SB concerns (included in SB concern numbers)	\$89,998,797	1.6%		
Total planned and available for subcontracting to Native American Owned (NAB) concerns (includes both Large Business (LB) and SB NABs; SB NAB number are included in SB concerns; LB and SB NAB numbers are included in SDB concerns)	\$56,249,248	1.0%		
Total planned and available for subcontracting to Veteran-Owned SB concerns (included in SB concern numbers)	\$281,246,243	5.0%		
Total planned and available for subcontracting to Service-Disabled Veteran-Owned SB concerns (included in SB concern numbers)	\$8,437,387	0.15%		
Total planned and available for subcontracting to Washington and Oregon-based businesses (includes large and small businesses)	\$1,968,723,701	35.0%		

3. Potential Subcontracting Opportunities for Small Business

Items to be subcontracted under this contract and the types of business supplying them are:

Subcontracting Items	Large Business	Small Business	Disadvantaged Small Business	Woman- Owned Small Business	HUBZone Small Business	Veteran- Owned Small Business	Service- Disabled Veteran- Owned
Construction	X	X	X	X	X	X	X
Roofing/Siding	Х	Х	X			X	
Architectural Specialties/Casework	Х	Χ	Х	Х		Х	
NDE/Other Testing	Х	Χ	1000				
Equipment/Piping Insulation	Х	X	Х	Х			
Surfacing/Paving	Х						
Surveying	Х	Χ	X	X	Х	Х	
Elevators	Х						
Gas Systems	Х						
Transportation/Freight	Χ	Χ					
Misc. Construction Services	Х	Χ	X	Х	х	Х	Х
Misc. Construction Equip.	Х	Х	X	Х	Х	Х	Х
Pipe/Valve/Fittings	X	X	X	X	X	Х	Х
Civil/Structural/Architectural	Х	X	X	X	Х	X	
Concrete Anchors	Х	Χ		X	Х		
Fabricated Metal Embeds	Х						
Electrical	Х	Х	X	X	x	Х	
Fiber Optic/Power Cable	Х	X	X	X		Х	Marie Control of the
ITS Fused Panels	Χ						
Through Wall Lighting	Х	Χ				Х	
Instrumentation & Controls	х	X	X	X	X	X	
Laboratory Equipment	Х	Χ	X	X	Х	Х	
Flow Instruments	Х	Χ					
Process Gauges	X	Χ					
Instrument Hoses	Х	Χ	X	X			
Transmitters	X	Χ					
Cesium/Air/Seismic/Contamination Monitors	Х	Χ		Х		Х	
Jumpers/Melters	X	Х	×	X		X	
Rigid Process Jumpers/Fab	Х					-	
Pulse Pot Frames	Х						
Gaskets/Connectors	X	Х	Х	Х		Х	
Heat Exchangers	Х	Х	Х	Х		Х	
Mechanical/HVAC	X	X	X	X	X	X	X
Cranes/Lift Beams	Х	Х					
Pressure Vessels/Pumps	Х	Х	Х	Х	Х	Х	Х
Metal Fabrication	Х	Х	Х	Х	Х	X	Х
Piping Racks/Specialty Items	Х	Х		Х	Х	Х	Х
Chiller Plant/Cooling Tower	Х	Х	Х	Х	Х	Х	Х
Bulges/Absorbers/Tanks	Х	Х	X	Х	Х	Х	Х
HEPA/Inline Filters	Х	Х		Х		Х	
Demisters/Humidifiers	Х	Х					l.co
Expansion Joints/Compressors	Х	Х		Х			
Chemicals/Storage	Х	Х	Х			Х	Х
Technical/Engineering Services & Office Products	х	x	x	X	X	х	х

4. Method Used to Develop Subcontracting Goals

The method used to develop the subcontracting goals for small business (SB), small disadvantaged business (SDB), woman-owned small business (WOSB), HUBZone small business (HUBZone), veteran-owned small business (VOSB), and service-disabled veteran-owned small business (SDVOSB) concerns is described as follows:

To establish the subcontracting goals and commitments, the WTP Project gathered available Project information, forecasted probable acquisition needs, and analyzed Project estimates. The Project also used its collective DOE experience to determine potential requirements and contingencies. The Project's subcontracting goals are both realistic and attainable. The goals will be reached by:

- Utilizing acquisition procedures to ensure participation by small business concerns
- Requiring the inclusion of participation by appropriate small business concerns as a proposal/bid requirement in future procurements.

5. Methods Used to Identify Potential Sources for Solicitation

The method used to identify potential sources for solicitation purposes is as follows:

- Utilize the System for Award Management (SAM.gov) and the Small Business Administration's Dynamic Small Business Search Database.
- Utilize Bechtel's Global Supplier Information System (GSIS).
- Coordinate with other Hanford Site Prime Contractors to seek information on small, small disadvantaged, womanowned, HUBZone, veteran-owned, and service-disabled veteran-owned small businesses.
- Coordinate with the State and Regional Small Business Administration representatives and resources.
- Participate in various regional small, small disadvantaged, woman-owned, HUBZone, Native American owned, veteran-owned, and service-disabled veteran-owned small businesses trade associations.
- Sponsor and participate in trade fairs to inform small, small disadvantaged, woman-owned, HUBZone, Native American owned, veteran-owned, and service-disabled veteran-owned small businesses about upcoming procurement opportunities.

6. Indirect Costs

Indirect costs are () are not (X) included in the above goals.

7. Administrator of Small Business Subcontracting Plan

The following individual will administer the subcontracting program:

Name:

Frank R. Salaman, Acquisition Services Manager

Address:

2435 Stevens Center Place

Richland, WA 99354

Telephone:

(509) 371-9561

Email:

frsalama@bechtel.com

This individual's specific duties, as they relate to the firm's subcontracting program, are as follows. General overall responsibility for reviewing and monitoring execution of the plan including but not limited to:

- Ensure that source lists of potential subcontracts for which goals are established herein are maintained.
- Ensure that procurement packages are structured to permit small, small disadvantaged, woman-owned, HUBZone,
 Native American owned, veteran-owned, and service-disabled veteran-owned small business concerns to participate to the maximum extent possible.
- Seek out other SB concerns through the use of mass media tools when the number of prospective sources is not
 adequate.
- Mentor SBs currently under subcontract, enhancing their ability to provide timely, cost-effective, and quality services.
- Attend SB training, monitor program changes to ensure compliance review, revise, amend applicable procedures.

- Advise other personnel of the purposes of this program and ensure adequate support by all concerned.
- Maintain records showing BNI's performance compared with the goals established herein and submit information on the forms specified in the contract in a timely manner.
- Establish and maintain a relationship with the Small Business Administration and representatives to obtain assistance
 in finding competent small, small disadvantaged, woman-owned, HUBZone, Native American owned, veteran-owned,
 and service-disabled veteran-owned small business concerns.
- Coordinate with other Hanford Site Prime Contractors to secure data on small, small disadvantaged, woman-owned, HUBZone, Native American owned, veteran-owned, and service-disabled veteran-owned small businesses and their capabilities.
- Report to the WTP Project Director on the progress made towards meeting the Small Business Subcontracting Plan
 goals and identification of action items to continuously improve on the plan.

8. Implementation

The following efforts will be made to assure that small, small disadvantaged, woman-owned, HUBZone, Native American owned, veteran-owned, and service-disabled veteran-owned small business concerns will have an equitable opportunity to compete for subcontracts.

- Identify known potential sources as large concerns, small, small disadvantaged, woman-owned, HUBZone, Native American owned, veteran-owned, and service-disabled veteran-owned small business concerns.
- Include small, small disadvantaged, woman-owned, HUBZone, Native American owned, veteran-owned, and service-disabled veteran-owned small business concerns in Request for Proposals where such concerns are known to exist and are qualified to supply the item(s) or service being procured.
- Assist all small business concerns in providing management counseling on request.
- Provide sufficient bid solicitation time for preparation of proposals, quantiles, specification, and delivery schedules to facilitate participation.
- Participate in small, small disadvantaged, woman-owned, HUBZone, Native American owned, veteran-owned, and service-disabled veteran-owned small business trade fairs and conferences. Provide promotional activities which increase community awareness of subcontracting opportunities.
- Prepare work scopes to develop opportunities which can be bid and executed by all small business concerns.
- Maintain good working relationships with Small Business Administration representatives to obtain assistance and coordination in finding capable SBs.

9. Subcontract Flow-Down

The clause entitled "Utilization of Small Business Concerns" will be included in all subcontracts that offer further subcontracting opportunities and all subcontractors (except small business concerns) who receive subcontracts in excess of \$550,000 (\$1,000,000 for construction of any public facility) will be required to adopt a similar plan.

10. Reports, Studies, and Surveys

The Offeror/Subcontractor will cooperate in any studies or surveys as may be required; submit periodic reports in order to allow the Government to determine the extent of compliance with the subcontracting plan; submit the "Individual Subcontracting Report" (ISR) and "Summary Subcontracting Report" (SSR) in accordance with the instructions on the eSRS website at www.esrs.gov; and ensure that its subcontractors agree to submit reports online utilizing eSRS.

ISR data must be submitted online at www.esrs.gov on a semi-annual basis on or before April 30 and October 31. SSR data must be submitted online at www.esrs.gov on or before October 31.

11. Records

The types of records that will be maintained to demonstrate the procedures adopted to ensure compliance with the requirements and goals of the Small Business Subcontracting Plan include:

- a. Source lists (e.g., SAM.gov and SBA's Dynamic Small Business Search database), guides, and other data that identify small business, small disadvantaged, woman-owned, HUBZone, Native American owned, veteran-owned, and servicedisabled veteran-owned small business concerns.
- Organizations contacted in an attempt to locate sources that are small, small disadvantaged, woman-owned, HUBZone, Native American owned, veteran-owned, and service-disabled veteran-owned small business concerns.
- c. Records on each subcontract solicitation resulting in an award of more than \$150,000, indicating:
 - Whether small business concerns were solicited and, if not, why not;
 - o Whether small disadvantaged business concerns were solicited and, if not, why not;
 - Whether woman-owned small business concerns were solicited and, if not, why not;
 - o Whether HUBZone small business concerns were solicited and, if not, why not;
 - Whether Native American owned business concerns were solicited and, if not, why not;
 - Whether veteran-owned small business concerns were solicited and, if not, why not;
 - o Whether service-disabled veteran-owned small business concerns were solicited and, if not, why not;
 - If applicable, the reason award was not made to a small business concern.
- d. Records of any outreach efforts to contact:
 - o Trade associations
 - o Business development organizations
 - Conferences and trade fairs to locate small business, small disadvantaged, woman-owned, HUBZone, Native American owned, veteran-owned, and service-disabled veteran-owned small business sources.
- e. Records of internal guidance and encouragement provided to acquisition personnel through:
 - Workshops, seminars, training, etc.
 - o Monitoring performance to evaluate compliance with the program's requirements.

f. On a contract-by-contract basis, records to support award data submitted, including the name, address, and business size of each subcontractor.

Signed:

Margaret J. Mc Cullough

Date:

11/14/16

12/15/16

Typed Name:

M. G. McCullough

Company:

Bechtel National, Inc., Waste Treatment Plant Project

Konnie Z. Dawson

Title:

Project Director

Plan Accepted By:

Poppie I Dougen

Typed Name: Company:

U.S. Department of Energy, Office of River Protection (ORP)

Title:

ORP-WTP Contracting Officer

SECTION J – LIST OF ATTACHMENTS ATTACHMENT E – LIST OF APPLICABLE DIRECTIVES (LIST B-DEAR 970.5204.78)

(a) Environmental, Safety, and Health (ES&H) requirements appropriate for work conducted under this Contract that have been determined by a U.S. Department of Energy (DOE) approved process to evaluate the work and the associated hazards and identify an appropriately tailored set of standards, practices, and controls:

DOCUMENT NUMBER	DATE	TITLE
		DELETED (130)
		DELETED (166)
RL/REG-97-04	08/02	DELETED (206)
RL/REG-97-05	07/19/01	DELETED (206)
RL/REG-97-13		DELETED (166)
RL/REG-98-05	07/01/99	DELETED (206)
RL/REG-98-06	06/30/99	DELETED (206)
RL/REG-98-14	06/29/98	DELETED (206)
RL/REG-99-17	04/25/01	DELETED (206)
RL/REG 2000-03	05/04/01	DELETED (206)
DOE O 420.1B, contractor requirements document (CRD)	12/22/05	Facility Safety (Partial Implementation per CCN: 168377 [U.S. Department of Energy, Office of River Protection {ORP} 07-WTP-306] and CCN: 170076) (133) to include Office of Environmental Interim Policy, "Code of Record for Nuclear Facilities" dated September 3, 2009. (170, 175)
DOE O 420.1C, CRD	12/04/12	Facility Safety (Partial Implementation per ORP 13-TRS-0014, dated April 26, 2013, and CCN: 260182) to only implement new Maximum Possible Fire Loss threshold values. (310)
DOE O 470.2B, CRD	10/31/02	Independent Oversight and Performance Assurance Program. (175, 290)

(b) Additional Directives applicable to this Contract. The directive(s) or applicable section(s) of the directive(s) are applied as specified in other sections of this Contract.

DOCUMENT NUMBER	DATE	TITLE	CROSS REFERENCE
06-AMD-050 (CCN 144548)		DELETED (310)	
		Deleted (376)	
DOE/EM-0093	12/96	Waste Acceptance Product Specifications for Vitrified High-Level Waste Forms (WAPS), Revision 2 (114)	Contract Clause C.8, Specification 1, 1.2.1.4 and 1.2.2.1.1(175)
DOE/RL-94-02, Rev 6 (336)	06/2014 (336)	Hanford Emergency Management Plan (197, 310) (Revision 6, June 2014) (336)	Contract Clause C.6, Standard 4(j) and Standard(e)(1) Table S7-1 (175, 197, 336)

DOCUMENT NUMBER	DATE	TITLE	CROSS REFERENCE
DOE M 140.1- 1B, CRD	03/30/01	Interface with Defense Nuclear Facilities Safety Board. DELETED (530)	Contract Clause C.4 (d) (175)
DOE O 140.1A CRD	06/15/21	Interface with Defense Nuclear Facilities Safety Board	Contract Clause C.4 (d) (530)
DOE O 142.3A, CRD	10/14/10	Unclassified Foreign Visits and Assignments Program (047, 124, 204)	The order is effective regardless of comment above at (b) (175)
DOE O 151.1C, CRD	11/02/05	Comprehensive Emergency Management System (310)	Implemented in accordance with DOE/RL-94-02
DOE O 205.1B, Change 2, CRD	12/07/12	Cyber Security Program (387)	Effective with Modification No. 384 and implemented in accordance with CCN: 266220 (14-WTP-0011), Attachment 1, "CRD 205.1B, Chg 2 (Supplemented Rev. 0)" and CCN: 267962 (14-WTP-0051). (387).
DOE M 205.1-2		DELETED (175)	
DOE M 205.1-5, CRD		DELETED (194)	
DOE M 205.1-6, CRD		DELETED (194)	
DOE M 205.1-7, CRD		DELETED (194)	
DOE M 205.1-8, CRD		DELETED (194)	
DOE O 206.1, CRD	01/16/09	DOE Privacy Program (235)	The order is effective regardless of comment above at (b). Contractor shall implement in accordance with CCN: 231161(321)
DOE O 206.2, CRD, Supplemented Rev. 1 (425)	02/19/13	Identity, Credential, and Access Management (307)	The order is effective regardless of comment above at (b) (307)
DOE O 210.2A, CRD	04/8/11	DOE Corporate Operating Experience Program (077, 310)	Contract Clause H.49 (175) Refer to Note 10 (310)
DOE O 221.1A, CRD		DELETED (467)	
DOE O 221.1B, CRD	09/27/16	Reporting Fraud, Waste and Abuse to the Officee of Inspector General (467)	Refer to Note 3 (467)
DOE O 221.2A, CRD	02/25/08	Cooperation with the Office of Inspector General (133)	Refer to Note 3 (175)

DOCUMENT NUMBER	DATE	TITLE	CROSS REFERENCE
DOE O 225.1B, CRD	03/04/11	Accident Investigations (310)	Refer to Note 9 (310)
DOE O 226.1B, CRD	04/25/11	Implementation of Department of Energy Oversight Policy (069, 108, 310)	Contract Clause H.46 (175) Refer to Note 11 (310)
DOE O 231.1B, CRD (363)	6/27/2011	Environment, Safety, and Health Reporting (033, 310)	Contract Clause C.6, Standard 1(d)(6) (175, 310)
DOE M 231.1- 1A, Change 2, CRD		DELETED (332)	
DOE M 231.1-2, CRD		DELETED (256)	
SCRD M 231.1- 2		DELETED (256)	
DOE Order 232.2A, CRD (406)	9/29/2017	Occurrence Reporting and Processing of Operations Information(406)	Contract Clause C.6, Standard 1(d)(5) and (6). (406)
OOD-ORP-PPD- PAI-50136, Appendix C (513)	07/22/2019	Facility Representative Contractor Requirements Document (476)	
CRD O 232.2A (Supplemented Rev.0)(406)	9/29/2017	Environmental Management Contractor Requirements Document (Supplemented DOE O 232.2A), Occurrence Reporting and Process of Operations Information (406) DELETED (476)	Contract Clause C.6, Standard 1(d)(5) and (6).(406)
SCRD DOE Order 232.2A (406)	9/29/2017	ORP Supplemental Contractor Requirements Document (SCRD), for DOE Order 232.2A, Occurrence Reporting and Processing of Operations Information (406) DELETED (476)	Contract Clause C.6, Standard 1(d)(5) and (6). (406)
HFID 232-1B		DELETED (256)	
DOE N 234.1, CRD		DELETED (310)	
DOE O 241.1, CRD		DELETED (310)	
DOE/RW-0333P	10/01/08	Quality Assurance Requirements and Description for the Civilian Radioactive Waste Management Program (QARD) – Revision 20 (099, 134)	Contract Clause C.6, Standard 2(a)(2)(v), Standard 5(d), and Standard 7(e)(3)(ii)(A) and Contract Clause C.8, Specification 1, 1.2.1.7, 1.2.2.1.1, and 1.3 (175)

DOCUMENT NUMBER	DATE	TITLE	CROSS REFERENCE
DOE O 350.1, Chg 3, CRD	02/23/10	Contractor Human Resource Management Program (171, 175)	Contract Clause H.37 (175)
DOE/RW-0351	5/31/07	Waste Acceptance System Requirements Document— (WASRD) - Revision 5 (114)	Contract Clause C.6, Standard 2(a)(3)(vii)(E) and Standard 6(c)(2) and Contract Clause C.8, Specification 1, 1.2.1.3 and 1.2.2.1.1 (175)
DOE O 413.3A, CRD		DELETED (271)	
DOE M 413.3-1		DELETED (271)	
DOE O 413.3B, CRD	11/29/10	Program and Project Management for the Acquisition of Capital Assets. Refer to Note 7 for implementation (271)	Contract Clause C.3, paragraph (b), subparagraph (1), item (ix), C.6, Standard 1, opening paragraph, (a), (b)(3) and (c)(1) and Standard 5(a)(6) and (k)
DOE O 414.1C, CRD	06/17/05	Quality Assurance (066)	Contract Clause C.6, Standard 7(e)(3)(i) & (iv) (175)
DOE 414.1D, CRD, Chg 1	05/08/13	Quality Assurance (349)	The order is effective regardless of comment above at (b) and implemented in accordance with Note 14 (349)
DOE O 420.1C, CRD, Chg 1, Chapter V	02/27/15	Facility Safety (Partial Implementation Only Chapter V. Cognizant System Engineer Program) (369)	The order is effective regardless of comment above at (b) Implemented for LBL commissioning only in accordance with CCN: 276975
DOE O 422.1, Change 1, CRD	06/25/13	Conduct of Operations (207)(387)	Effective with Modification No. 384 and implemented in accordance with CCN: 276479. (387)
DOE-0223	Effective the date of Modification No. 384	RL Emergency Plan Implementing Procedures (384)	Implemented in accordance with 16-CPM-0072
DOE-0336	9/15/2011	Hanford Site Lockout/Tag out (384)	Implemented in accordance with 16-CPM-0072
DOE-0343	3/26/2013	Hanford Site Wide Stop Work Order Procedure (384)	Implemented in accordance with 16-CPM-0072
DOE-0346		Hanford Site Fall Protection Program (HSFPP) (384)	Implemented in accordance with 16-CPM-0072
DOE-0352	11/14/2012	Hanford Site Respiratory Protection Program (HSRPP)	Implemented in accordance with 16-CPM-0072
		(384)	
DOE-0355		Hanford Standardized HAZWOPER Training Program Description (384)	Implemented in accordance with 16-CPM-0072

DOCUMENT NUMBER	DATE	TITLE	CROSS REFERENCE
DOE-0359	11/14/2012	Hanford Site Electrical Safety Program (384)	Implemented in accordance with 16-CPM-0072
DOE-0360		Hanford Site Confined Space Procedure (384)	Implemented in accordance with 16-CPM-0072
DOE O 425.1D, Chg 1, CRD	04/16/10	Verification of Readiness to Start Up or Restart Nuclear Facilities (033, 190, 310)	Contract Clause C.6, Standard 5(a)(5), (c)(6), (e)(2), (f)(ii), and (g) (175, 310) Contractor shall implement in accordance with CCN: 281821 (363)
DOE O 426.2, CRD	04/21/10	Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities (310)	Contract Clause C.3(f)(6) (321) Refer to Note 8 (310)
DOE O 433.1B, CRD Admin Chg 1	04/21/10 03/12/13	Maintenance Management Program for DOE Nuclear Facilities (342)	This order is effective regardless of comment above at (b). (342, 387)
DOE O 435.1, Chg 1, CRD	08/28/01	Radioactive Waste Management	Implementation of this DOE CRD using the graded approach; approved by 05-WED-047; CCN: 136281 satisfies the comment above at (b) (130, 175, 278)
DOE M 435.1-1	07/09/99	Radioactive Waste Management Manual	Contract Clause C.8, Specification 2, 2.2.1.13, 2.2.2.23, & 2.4 (175)
DOE M 441.1-1, CRD	03/07/08	Nuclear Material Packaging	The manual is effective regardless of comment above at (b) (130, 175)
DOE O 442.1B	01/31/19	Department of Energy Employee Concerns Program (490)	Contractor shall implement in accordance with CCN: 319207 (490)
DOE O 442.2, Chg 1, CRD	10/05/16	Differing Opinions for Technical Issues Involving Environment, Safety, and Health (271, 440)	The order is effective regardless of comment above at (b) and implemented as described in CCN: 246747
DOE O 442.1A & Supplemented Rev. 3 CRD		DELETED (490)	
DOE M 442.1-1 CRD		DELETED (271)	
DOE M 450.4-1, CRD		DELETED (310)	
DOE O 458.1, Chg. 2		Radiation Protection of the Public and the Environment (384)	Implemented in accordance with 16-CPM-0072
DOE O 470.4B, Chg 2, CRD	01/17/17	Safeguards and Security Program (505)	

DOCUMENT NUMBER	DATE	TITLE	CROSS REFERENCE
DOE M 470.4-1, CRD		DELETED (505)	
DOE M 470.4- 2A, CRD		DELETED (310)	
DOE M 470.4- 4A	01/16/09	Information Security Manual (145)	Refer to Note 2 (175)
DOE O 471.3, CRD	4/9/03	Identifying and Protecting Official Use Only Information (087)	Contract Clause H.50 (175)
DOE M 471.3-1, Chg 1, CRD	4/9/03	Manual for Identifying and Protecting Official Use Only Information (087, 310)	Contract Clause H.50 (175) Refer to Note 12 (310)
DOE O 473.3, CRD	06/29/11	Protection Program Operations (310)	The order is effective regardless of comment above at (b)
DOE O 475.1, CRD	12/10/04	Counterintelligence Program (071)	Contract Clause C.6, Standard 8(c) (175)
DOE O 486.1A, CRD	09/02/2020	Foreign Government Sponsored or Affiliated Activities (495)	The order is effective regardless of comment above at (b)
DOE O 551.1D, CRD	04/02/12	Official Foreign Travel. Refer to Note 4 (141, 175, 283)	Contract Clause I.109 (175). Implemented in accordance with CCN: 243970, and 12-WTP-0272 (CCN: 251792) and Note 4 (283, 363)
DOE/RW-0511, Volume I, Rev. 4	03/07/08	Integrated Interface Control Document (ICD), High-Level Radioactive Waste and U.S. Department of Energy and Naval Spent Nuclear Fuel to the Civilian Radioactive Waste Management System (114)	Contract Clause C.8, Specification 1,1.2.1.5 and 1.2.2.1.1 (321)
DOE-HDBK- 1092-2004, Appendix A	12/2004	DOE Electrical Safety Handbook. Refer to Note 6 (209)	The order is effective regardless of comment above at (b)
RL/REG-2000- 04		DELETED (215)	
DOE/ORP-2000- 06		Deleted through Contract Modification No. M082 (175)	
DOE STD 3009 DOE O 5480.20A, Change 1, CRD		DELETED (310) DELETED (310)	
SCSP	05/9/06	Richland Regional Office Site Counterintelligence Support Plan Hanford Site - Bechtel National, Inc. (BNI) (071)	Contract Clause C.6, Standard 8(c) (175)

DOCUMENT NUMBER	DATE	TITLE	CROSS REFERENCE
DOE-0361		DELETED (366)	
HNF-EP-0063	02/01/11	Hanford Site Solid Waste Acceptance Criteria (310)	The order is effective regardless of comment above at (b)
HNF-SD-GN- 501, Rev. 2	07/30/12	Natural Phenomena Hazards, Hanford Site, Washington	Contract Clause C.6, Standard 3(b)(2)
DOE/RL-92-36 Rev 1, Release 84	11/18/14 03/04/20	Hanford Site Hoisting and Rigging Manual (342) (476)	The order is effective regardless of comment above at (b) and implemented in accordance with Note 13
DOE/RL-2001- 36, Rev 1E, Appendix I.7	05/01/11	Immobilized low-activity waste (ILAW) Special Packaging Authorization of the Hanford Sitewide Transportation Safety Document (310)	Implemented per C.8, Specification 2, 2.2.1.21 and 2.2.2.10 (293)
DOE/RL-2002- 12		Hanford Radiological Health and Safety Document (384)	Implemented in accordance with 16-CPM-0072
DOE-STD-3009	1994	Preparation Guide for DOE Nonreactor Nuclear Facility Safety Analysis Reports (Change Notice 3, March 2006) (029, 152, 321)	Contract Clause C.6, Standard 9, paragraph 2 (321) DELETED (472)
DOE-STD-1228	2019	Preparation of Documented Safety Analysis for Hazard Category 3 Nuclear Facilities (472)	Contract Clause C.6, Standard 9, paragraph 2 (472)
DOE-HDBK- 1092-2013, Appendix D	07/2013	DOE Electrical Safety Handbook. Refer to Note 15 (353)	The order is effective regardless of comment above at (b)
DOE-STD-1195	09/2016	Design of Safety Significant Safety Instrumented Systems Used at DOE Non-Reactor Nuclear Facilities (384)	Implement clause 11.4 (inclusive of subclauses 11.4.1 through 11.4.9) of International Electrotechnical Commission (IEC) standard 61511-1 (Edition 2.0) concurrent with DOE-STD-1195-2011 as a means of achieving Safety Integrity Level – 2 (SIL-2) for low demand simple Safety Instrumented Functions without requiring redundancy, particularly with respect to final control devices such as valves. (384)

Notes:

1. DELETED (505)

- 2. Contractor scope of DOE M 470.4-4A is limited to the Operations Security (OPSEC) requirements listed in ORP letter 08-ESQ-318 (CCN: 192555), which states that the following actions are required:
 - Appoint an OPSEC representative;
 - Ensure the OPSEC representative attends Hanford OPSEC Working Group meetings on a quarterly basis;
 - Obtain OPSEC/Security Awareness Posters from Project Hanford Management Contracts Safeguards and Security Awareness Manager and ensure they are posted in BNI working areas; and
 - Annually conduct three OPSEC reviews/assessments of BNI work areas.
- 3. The Contractor shall implement DOE O 221.1, CRD and DOE O 221.2, CRD into all new subcontract awards beginning January 1, 2003, except for those acquisitions for commercial items and for any new acquisition awards under \$100,000. DOE O 221.1A, CRD and DOE O 221.2A, CRD shall be implemented into all new subcontract awards beginning October 1, 2008 using the same criteria. Flow down of the requirements of these DOE order CRDs to subcontractors using these criteria meets the intent of ensuring compliance with the DOE order CRD requirements.
- 4. This order deemed to be the "subsequent version of the order in effect at the time of award" per DEAR 952.247-70. Implementation shall include compliance with DOE Office of Environmental Management Standing Operating Policy Procedure 66, Official Foreign Travel, Revision 0, with the exception of Standing Operating Policy Procedure Sections 7.D and 9.B.5.
- 5. DELETED (336)
- 6. The Contractor shall implement DOE-HDBK-1092-2004, Appendix A, as described in 10-WTP-327 (CCN: 229364) and CCN: 229141.
- 7. The Contractor shall implement DOE O 413.3B, as described in CCN: 242792 and 12-WTP-0159.
- 8. The Contractor shall implement DOE O 426.2, CRD, as described in CCN: 249671.
- The Contractor shall implement DOE O 225.1B, CRD, as described in CCN: 249671 (363).
- 10. The Contractor shall implement DOE O 210.2A, CRD, as described in CCN: 249671.
- 11. The Contractor shall implement DOE O 226.1B, CRD, as described in CCN: 249671.
- 12. The Contractor shall implement DOE M 471.3-1, Chg 1, CRD, as described in CCN: 249671.
- 13. Deleted. (387)
- 14. The Contractor shall implement DOE O 414.1D, CRD, Chg 1, as described in CCN: 222763, 15-QAD-0014 and 17-QAD-0063.
- 15. The Contractor shall implement DOE-HDBK-1092-2013, Appendix D as described in 14-CPM-0231 (CCN: 274546) and CCN: 257008. Unlisted equipment that is "Low-Hazard," defined as "Class X.0 or X.1" in Appendix D of the DOE handbook for

Electrical Safety, may be labeled or identified as such (e.g., "Unlisted Approval Not Required," "Low-Hazard," or "Class X.0, X.1") to indicate it is equipment that does not require field evaluation and approval. This exemption will only apply to Class X.0 and Class X.1 equipment that are connected to a power source of less than 50 volts and less than 1,000 volt-amps.

SECTION J – LIST OF ATTACHMENTS ATTACHMENT F – KEY PERSONNEL

Key Position (M110) (M130) (M133) (M147) (M152) (M158) (A164) (M181) (206) (208) (242) (261) (276) (291) (303) (308) (332) (336) (353) (366) (369) (376) (387) (391) (419) (425) (440) (457) (467) (476) (513) (521) (530)	Current Employee
Project Director	Valerie McCain
Deputy Project Director	Chris Musick
Manager of Safety & Health	Michael Zustra
Plant Manager & Nuclear Facility Manager	Kent Smith
Manager of Quality	Raj Jolly
Manager of Engineering and Design Authority	lan Milgate
Manager of Business Services	Matt McCluskey
Site Director	Rick Holmes

SECTION J – LIST OF ATTACHMENTS ATTACHMENT G – PERFORMANCE GUARANTEE AGREEMENT

For value received, and in consideration of: and in order to induce the United States (the Government) to enter into Contract DE-AC27-01RV14136 for the design, construct, and commission of the Waste Treatment and Immobilization Plant (WTP) to treat and immobilize Hanford tank waste (Contract dated, December 11, 2000), by and between the Government and Bechtel National, Inc. (Contractor), the undersigned, Bechtel National, Inc. (Guarantor), a corporation incorporated in the State of Nevada with its principle place of business at 45 Fremont Street, San Francisco, CA 94105, hereby unconditionally guarantees to the Government (a) the full and prompt payment and performance of all obligations, accrued and executory, which Contractor presently or hereafter may have to the Government under the Contract, and (b) the full and prompt payment and performance by Contractor of all obligations and liabilities of Contractor to the Government, fixed or contingent, due or to become due, direct or indirect, now existing or hereafter and howsoever arising or incurred under the Contract, and Guarantor further agrees to indemnify the Government against any losses the Government may sustain and expenses it may incur as a result of the enforcement or attempted enforcement by the Government of any of its rights and remedies under the Contract, in the event of a default by Contractor hereunder, and/or as a result of the enforcement or attempted enforcement by the Government of any of its rights against Guarantor hereunder.

Guarantor has read and consents to the signing of the Contract. Guarantor further agrees that Contractor shall have the full right, without any notice to or consent from Guarantor, to make any and all modifications or amendments to the Contract without affecting, impairing, or discharging, in a whole or in part, the liability of Guarantor hereunder.

Guarantor hereby expressly waives all defenses which might constitute a legal or equitable discharge of a surety or guarantor, and agrees that this Performance Guarantee Agreement shall be valid and unconditionally binding upon Guarantor regardless of (i) the reorganization, merger, or consolidation of Contractor into or with another entity, corporate or otherwise, or the liquidation or dissolution of Contractor, or the sale or other disposition of all or substantially all of the capital stock, business or assets of Contractor to any other person or party, or (ii) the institution of any bankruptcy, reorganization, insolvency, debt agreement, or receivership proceedings by or against Contractor, or adjudication of Contractor as a bankrupt, or (iii) the assertion by the Government against the Contractor of any of the Governments rights and remedies provided for under the Contract, including any modifications or amendments thereto, or under any other document(s) or instrument(s) executed by Contractor, or existing in the Government's favor in law, equity, or bankruptcy.

Guarantor further agrees that its liability under this Performance Guarantee Agreement shall be continuing, absolute, primary, and direct, and that the Government shall not be required to pursue any right or remedy it may have against Contractor or other Guarantors under the Contract, or any modifications or amendments thereto, or any other document(s) or instrument(s) executed by Contractor, or otherwise. Guarantor affirms that the Government shall not be required to first commence any action or obtain any judgment against Contractor before enforcing this Performance Guarantee Agreement against Guarantor, and that Guarantor will, upon demand, pay the Government any amount, the payment of which is guaranteed hereunder and the payment of which by Contractor is in default under the Contractor or under any other document(s) or instrument(s) executed by Contractor as aforesaid, and that Guarantor will, upon demand, perform all other obligations of Contractor, the performance of which by Contractor is guaranteed hereunder.

Guarantor agrees to assure that it shall cause this Performance Guarantee Agreement to be unconditionally binding upon any successor(s) to its interests regardless of (i) the reorganization, merger, or consolidation of Guarantor into or with another entity, corporate or otherwise, or the liquidation or dissolution of Guarantor, or the sale or other disposition of all or substantially all of

the capital stock, business, or assets of Guarantor to any other person or party, or (ii) the institution of any bankruptcy, reorganization, insolvency, debt agreement, or receivership proceedings by or against Guarantor, or adjudication of Guarantor as a bankrupt.

Guarantor further warrants and represents to the Government that the execution and delivery of this Performance Guarantee Agreement is not in contravention of Guarantor's Articles of Organization, Charter, bylaws, and applicable law; that the execution and delivery of this Performance Guarantee Agreement, and the performance thereof, has been duly authorized by the Guarantor's Board of Directors, Trustees, or any other management board which is required to participate in such decisions; and that the execution, delivery, and performance of this Performance Guarantee Agreement will not result in a breach of, or constitute a default under, any loan agreement, indenture, or contract to which Guarantor is a party or by or under which it is bound.

No express or implied provision, warranty, representation or term of this Performance Guarantee Agreement is intended, or is to be construed, to confer upon any third person(s) any rights or remedies whatsoever, except as expressly provided in this Performance Guarantee Agreement.

In witness thereof, Guarantor has caused this Performance Guarantee Agreement to be executed by its duly authorized officer, and its corporate seal to be affixed hereto on.

BECHTEL NATIONAL, INC.

Original Signed By
T. F. Hash, President

GUARANTEE AGREEMENT ON BEHALF OF GUARANTOR

I, D.W. Price, certify that I am the Assistant Secretary of the corporation named as Guarantor herein; that T.F. Hash who signed this certificate on behalf of the Guarantor, was then President of said corporation; that said certificate was duly signed for and in behalf of said corporation, and is within the scope of its corporate powers; that I have caused the corporate seal to be affixed hereto.

Original Signed By

D. W. Price, Assistant Secretary

SECTION J – LIST OF ATTACHMENTS ATTACHMENT H TANK FARM CONTRACTOR STAFF AND SUBCONTRACTORS EMPLOYED ON THE WTP PROJECT

Staffing

The Tank Farm Contractor hired a total of 183 staff from BNFL Inc. and Bechtel National Inc. (BNI) that were previously supporting the Waste Treatment and Immobilization Plant (WTP) activities; approximately 138 are currently identified as available for transition to the WTP Contractor. Discipline and experience are as follows:

INTERIM DESIGN CONTRACTOR EMPLOYEES EXPERIENCE SUMMARY AS OF 8/30/00

DISCIPLINE	SENIOR	JUNIOR LEVEL	YEARS	AVERAGE YEARS
DISCIPLINE	LEVEL	(1-5 Years)	EXPERIENCE	EXPERIENCE
Engineers:				
Managers	2	0	18-30	18
Process Engineers	9	2	1-33	16
Civil/Structural	7	1	1-35	23
Mechanical	17	5	1-33	18
HVAC	21	0	7-35	25
Elect, I&C	18	0	9-39	24
Architectural	2	1	1-21	13
Construction Engineering	1	0	9	9
Quality Assurance	2	0	25-30	28
Layout/Design	2	0	18-35	27
Subtotal	81	9		
Designers:				
Civil/Structural	3	1	4-36	21
Mechanical	19	2	3-34	21
HVAC	5	0	7-20	16
Piping	5	0	10-25	22
Elect, I&C	2	0	14-35	23
Layout	9	2	2-15	7
Subtotal	43	5	_	
Total	124	14	_	
Total Interim Design	138			

Subcontracts

The Tank Farm Contractor placed subcontracts with 27 firms; providing about 260 total staff supporting the design, science and technology, and ongoing operations roles. Most of the staff augmentation contracts will be available for transition to the WTP Contractor. Summary of contracts, scope, and numbers of staff identified includes:

Subcontractor	Current Scope	Number of Staff
Associated Western Universities	Summer Interns	5
EnergX	Staff Augmentation	2
ESG (ESG Technical Services)	Staff Augmentation	3
Enabling Technology	Staff Augmentation	1
Fircroft	Staff Augmentation	51
Global Environmental	Staff Augmentation	1
GTS-Duratek	Staff Augmentation	19
Individual Consultants (7 each)	Staff Augmentation	7
Doug Campbell		
Gary Dukelow		
Mike Fox		
Bruce Hensley		
William Roe		
Gene Schroeder		
John Deichman		
Kelly Temporary Services	Staff Augmentation	31
LATA (Los Alamos Technical Associates)	Staff Augmentation	8
Manpower	Staff Augmentation	3
MCE (Mid-Columbia Engineering)	Staff Augmentation	7
MH Chew	Staff Augmentation	2
Noramtec	Staff Augmentation	30
Onsite Engineering	Staff Augmentation	15
Project Time & Cost	Staff Augmentation	3
SAIC (Science Applications International	Staff Augmentation-	44
Corp.)	safety, permitting, and design	
Scientech	Staff Augmentation	2
SCM	Staff Augmentation	8
TRI (Technical Resources International)	Staff Augmentation	13
Vista Engineering	Staff Augmentation	5

Science and Technology Support

The Tank Farm Contractor will have established work orders with Savannah River Technology Center, GTS-Duratek (including the Vitreous State Laboratory at Catholic University), Pacific Northwest National Laboratory, and IBC, Inc. for significant Science and Technology support to the WTP Project in the following areas:

Science and Technology Provider	Scope
Savannah River Technology Center	Chemical and radiochemical separations, waste form qualification
Pacific Northwest National Laboratory (PNNL)	Chemical and radiochemical separations, waste form qualification
GTS-Duratek	Pilot melter testing, melter testing, and glass development
IBC, Inc.	Ion exchange media development and testing

SECTION J – LIST OF ATTACHMENTS ATTACHMENT I

Reserved

SECTION J – LIST OF ATTACHMENTS ATTACHMENT J ADVANCE UNDERSTANDING ON COSTS

1. **RESERVED (479)**

2. Allowable costs for WTP Project-specific BNI employee permanent assignment compensation benefit shall be in accordance with the BNI Project Assignment Incentive (PAI), Revision 10 (dated February 2008), effective April 1, 2008 through September 1, 2018. **(423)**

Historical Notes:

- The tax assistance portion "gross up" of the PAI, in effect until February 26, 2007, shall be an unallowable cost. This "gross up" was eliminated with the issuance of PAI, Revision 9.
- The minimum 150-mile limit for recruited college students from Washington State University (Pullman, Washington campus only) and Eastern Washington University (Cheney, Washington campus only) is waived and PAI payments for such eligible recruited employees shall be allowable, subject to other allowability tests required under the contract, until April 1, 2008, at which time the limit was eliminated with PAI, Revision 10. **(126)**
- Effective June 1, 2018, BNI will no longer offer PAI to WTP Project employees. Existing
 offers will be honored through September 1, 2018. (423)
- 3. During 2001, BNI implemented an internal Six Sigma Program to provide a clear means of work process measurement and continuous process improvement that is expected to result in a net overall reduction in incurred costs under this Contract. Costs to implement the BNI Six Sigma Program are considered allowable costs under this Contract, subject to other required tests of allowability under this Contract, the Federal Acquisition Regulation, and the Department of Energy Acquisition Regulation.
- 4. Costs to implement the BNI Sharing for Success Program to enhance craft productivity and reduce overall project costs are considered allowable costs under this Contract, subject to other required tests of allowability under this Contract, the *Federal Acquisition Regulation*, and the *Department of Energy Acquisition Regulation*.
- 5. Effective from the date of Contract award, facilities capital cost of money shall be an allowable cost under this Contract, provided the criteria for allowability in FAR 31.205-10 are met.
- 6. Costs to implement the BNI Employee Recognition Program to support individual and team accomplishments and encourage the achievement of project goals are considered allowable costs under this Contract, subject to other required tests of allowability under this Contract, the Federal Acquisition Regulation, and the Department of Energy Acquisition Regulation.
- 7. Costs incurred in connection with hedging contracts entered into in connection with foreign currency purchases, including but not limited to the purchase cost, rollover costs to adjust a hedging contract to a new date in the event the payment date is delayed, and closure costs in the event a procurement is canceled, are considered allowable costs under this Contract, subject to other required tests of allowability under this Contract, the *Federal Acquisition Regulation*, and the *Department of Energy Acquisition Regulation*.
- 8. Costs to implement the BNI Vanpool Program to encourage project craft and nonmanual vanpooling are considered allowable costs under this Contract, subject to other required tests of

- allowability under this Contract, the Federal Acquisition Regulation, and the Department of Energy Acquisition Regulation.
- 9. Costs incurred in connection with the Washington State Retrospective Rating Program connected with Workers Compensation, including but not limited to surcharges, are considered allowable costs under this Contract, subject to other required tests of allowability under this Contract, the *Federal Acquisition Regulation*, and the *Department of Energy Acquisition Regulation*.
- 10. Multi-Employer Pension Plan (MEPP): (152)
 - a. The costs and expenses of the Contractor's participation in the MEPP are allowable Contract costs to the same extent as those costs are allowable under Contract No. DE-AC06-96RL13200 (Fluor) through August 23, 2009, and Contract No. DE-AC06-09RL14728 (Mission Support Alliance, LLC) thereafter. (206)
 - b. In the event that the Contractor withdraws from the MEPP, in accordance with the terms of the MEPP, the Contractor's withdrawal liability, if any, shall be an allowable cost of this Contract subject to availability of funds under this Contract.
 - c. In the event that the MEPP is overfunded at the time of the Contractor's withdrawal and the Contractor does not receive a cash disbursement of its share of such overfunding, DOE hereby waives the Contractor's obligations, if any, under FAR 52.215-15(b) to make payments to DOE, or otherwise adjust the Contractor's allowable costs, with respect to any amounts otherwise assessed in accordance with CAS 413-50(c)(12).
 - d. In the event that the Contractor becomes the last sponsoring employer of the MEPP, the Parties shall modify this agreement to address appropriate termination provisions and funding requirements.
 - e. This Advance Understanding shall be revised from time to time to incorporate any changes in those policies, practices, and procedures the related costs and expenses related to the MEPP.
- 11. The following pending items and trends are incorporated by reference in Modification No. **029**.

Case No.	Title	
	Issued to ORP	
4	PI-24590-01-00065 Additional Security Badging Requirements	
18	PI-24590-01-00093 Model Recovery, Maintainability, and RAMI Development	
6	PI-24590-01-00099 Construction Emergency Response Plan (Addendum for FH site emergency preparedness program)	
21	PI-24590-01-00112 Addition of C2 Filtration (HEPA) to Pretreatment, Low-Activity-Waste (LAW), and HLW Facilities	
	PI-24590-01-00117 Commissioning Maintenance Requirements	
17	PI-24590-01-00118 Plant Operator Qualification & Training Facility	
	PI-24590-01-00119 Commissioning Materials & Vendor Support	
	PI-24590-01-00120 Commissioning Testing and Operations Requirements	
	PI-24590-01-00121 Risk Assessment and Reporting	
19	PI-24590-01-00122 Analytical Laboratory and Temporary Laboratory Facilities	
	PI-24590-01-00131 Hazards/Accident Analysis Post PSAR Submittal	
	PI-24590-01-00133 Commissioning Procedure Writers	
	PI-24590-01-00135 QC Support to Commissioning	

Case No.	Title		
	PI-24590-01-00136 Commissioning Training		
	PI-24590-01-00138 Environmental Interface		
	PI-24590-01-00140 Operation Authorization Request (OAR) Development and Authorization Basis Maintenance		
	PI-24590-01-00142 Compliance with ISMS DEAR Clause, Safeguards and Security		
	PI-24590-01-00143 Pilot Scale Facility		
10	PI-24590-01-00147 Pulsed Jet Mixer Testing		
16	PI-24590-01-00150 LAW Canister Level Control		
	PI-24590-01-00153 A1-Incomplete WTP Conceptual Design - NOC & Sanitary Sewer		
	PI-24590-01-00153 A2 - Incomplete WTP Conceptual Design - SAP & CAR		
	PI-24590-01-00153 B - Incomplete R&T WTP Conceptual Design work (5 PIs)		
19	PI-24590-01-00154 HLW Melter Cell Reconfiguration Due to Analytical Laboratory (LAB) Reconfiguration		
13	PI-24590-01-00165 Vitrification, Rheology & Regulatory Analysis for the Rework of AZ-102 (Envelope B)		
2	PI-24590-01-00170 LAW Annex Modifications		
23	PI-24590-01-00181 Operations & Maintenance C3 Area Temperatures		
23	PI-24590-01-00194 Study Associated with C3 Temperatures		
	PI-24590-01-00197 Technical Integration Baseline Development Team		
	PI-24590-01-00201 LAW Throughput Increase to 45 MTG		
	PI-24590-01-00246 ES&H Fire Protection Support Program		
27	PI-24590-01-00278 Change in LAW Concrete and Structural Steel Quality Class		
	PI-24590-01-00309 Revised Scale-Up Ion Exchange Resin Quantities		
	PI-24590-01-00311 Radiological Safety Support		
3	PI-24590-02-00335 LAW Bubbler Failures Below the Melt Line		
	2001 Approved Trends		
1	PI-24590-01-00173 Detailed Study & Process Plan for Resolving Mercury Issues in Waste Feed		
14	PI-24590-01-00174 Maximum Achievable Control Technology		
14	PI-24590-01-00316 Mercury mitigation for LAW Melter & Offgas		
14	PI-24590-01-00327 Incorporate Activated Carbon Column in HLW Melter Offgas		
	PI-24590-01-00143 Pretreatment (PT) Integrated Pilot Facility - Infrastructure & Testing IX Processes		
4.0	2002 Approved Trends		
12	PI-24590-02-00341 Radiological Monitoring Standards Change from ANSI-N13.1-1969 to 1999		
7	PI-24590-02-00356 Critical Decision 3 - Extended Independent Review		
22	PI-24590-02-00358 Steam Reformer Technology Demonstration Acquisition		
20	PI-24590-02-00382 Evaluate and Test CS & TC Exchange Resins		
15	PI-24590-02-00395 DOE Order 420.1 Fire Safety Impact Assessment Study		
	PI-24590-02-00396 Melt Pool Corrosion of LAW Bubblers (Part 2)		

Case No.	Title
	PI-24590-02-00398 Evaluation of Seismic Safety DOE 420.1 Impact
	PI-24590-02-00405 LAB - Cost Reductions
	PI-24590-02-00415 Initial Testing of Steam Reforming Waste Product
	PI-24590-02-00431 DWPA Phased Approach
	PI-24590-02-00447 Pour Tunnel Catch Tank
	PI-24590-02-00453 Increase Pour Cave Cooling
	PI-24590-02-00508 Sales and Use Tax
25	PI-24590-02-00516 Regulatory Compliance Matrix
	PI-24590-02-00539 LAB Rad Effluent Line
	PI-24590-02-00550 Develop Implementation Plan & Start Testing of Alt. Resins
	PI-24590-02-00581 Mixing Tests and Computational Fluid Dynamic Modeling by R&T for PT and HLW
	PI-24590-02-00586 Delete BOF Encapsulation Facility from WTP
	PI-24590-02-00587 Modify BOF Spent Melter Staging Facility
	PI-24590-02-00589 Eliminate BOF Melter Assembly Building
	PI-24590-02-00590 Delete BOF Central Waste Storage Facility
	PI-24590-02-00591 Eliminate BOF Administration Building from WTP Site
	PI-24590-02-00601 Modification to HLW Melter Cave Support Handling System Shielding/Containment and Decontamination
	PI-24590-02-00635 Mercury - Sulfur Impregnation Carbon Tests
	PI-24590-02-00637 Mercury R&T Studies
	PI-24590-02-00665 Replace Welded Sealing of LAW Containers with Mechanical Sealing
	PI-24590-02-00666 Eliminate Tc Ion Exchange System (pending approval)
	PI-24590-02-00688 Stage 1 Cs Alternative Resin Testing
	PI-24590-02-00700 Develop Estimate for Implementing DOE Order 435.1
	PI-24590-02-00706 2 + 2 Melter Option
	PI-24590-02-00723 Commissioning and Training Cost Savings Initiatives
	PI-24590-02-00725 Schedule Impact of Cumulative Changes
	PI-24590-02-00728 Alternate Cesium Ion Exchange Resin Testing: Stages II & III
	PI-24590-02-00742 Develop Supplemental EIS Data Package
	PI-24590-02-00744 Include Battelle R&T Sample Residue Handling & Disposal
	PI-24590-02-00754 Foreign Travel Coordinator DEAR 952-247-70
	PI-24590-02-00758 Replace Uniform Building Code with International Building Code for Fire Proofing Design
	PI-24590-02-00779 Trend Implementation Variance vs. Approved ROM
	PI-24590-02-00782 R&T Testing of Ion Exchange Pressure Drop Issue

All items above may have subsequent update revisions, interpretations, or other clarifications that are agreed to by letter. Such updates shall be deemed to be incorporated by reference where stated.

12. The Contractor's Employee Referral Bonus Program is an allowable cost for a period of two (2) years, from March 26, 2007, to March 25, 2009, with a not-to-exceed total cost of \$150,000,

and one (1) year from March 4, 2014, with a not-to-exceed total cost of \$100,000. The Contractor shall prorate the \$2,500 bonus over the new hire's first year of employment should the new hire leave the project prior to completing one (1) year of employment. The policies establishing the program, and the applicable time periods are:

- Program as contained in contractor letter, CCN: 146882, dated March 13, 2007, applies to the period March 26, 2007, through March 25, 2008.
- Program as contained in contractor letter CCN: 162480, dated April 1, 2008, applies to the period March 26, 2008, through March 25, 2009. **(086, 123)**
- Program as contained in contractor letter CCN: 259128, dated December 13, 2013, and DOE letter CCN: 266666, dated March 4, 2014, applies to the period March 4, 2014, through March 3, 2015.
- 13. The following requirements are incorporated into and made a part of this Contract. Not-to-exceed amounts for these items have been authorized. The items listed in Table 13-A were definitized by Modification No. A143. (101, 130, 136, 143, 155)

Table 13-A. Not-To-Exceeds Definitized by Modification No. A143 (155)

Document ID	Title
TN 24590-03-01341	Seismic Attenuation Study to Support ORP (101)
TN 24590-03-01071	Maximum Achievable Control Technology/Destructive and Removal Efficiency Testing (101)
TN 24590-03-01318	Supplemental LAW Treatment Study (101)
TN 24590-03-01317	QA Testing of HEPA Filters at DOE Filter Test Facility (FTF) (101)
TN 24590-03-01482	Earned Value Management System (EVMS) Criteria Crosswalk (101)
TN 24590-03-01315	PTF Black Cell Access Trend (101)
TN 24590-03-01213	Concentrate Receipt Vessels (CRV) Deletion (102)
TN 24590-05-01906	PNNL Seismic Borehole Drilling Support (102)
TN 24590-06-01930	Technical Feasibility Study of WTP Startup Sequencing (098, 130)
TN 24590-06-02430	Perform Impact Assessment of Borehole Data (098, 130)
BCP-24590-06-03419	Implementation of ASME NQA-1 2000 and QARD Revision 18 for performance by BNI subcontractor Duratek, Inc. (135)
ORP 08-AMD-213 (10/06/08) (CCN: 187713) TN 24590-06-03628	DOE ORP Direction to Cancel the Temporary LAW Melter Assembly Building Procurement (141)

13-B. Not-To-Exceeds Not Included in Modification No. A143 Definitization (M155)

DOCUMENT ID.	TITLE	DEFINITIZATION MODIFICATION NO.
BCP-24590-06- 02279	Expansion of DWP Requirements (permit modifications) (122) (130)	A193
ORP 08-NSD-011 (05/20/08) (CCN:179512) TN 24590-06-	ORP Direction to Implement New Preliminary Safety Analysis Report (PSAR) Updates (136)	A164
03487 ORP 08-NSD-057 (10/09/08) (CCN:188218) TN 24590-06- 03752	Direction to Implement New Safety Classification Process for the Waste Treatment and Immobilization Plant (WTP) (141)	276
ORP 08-NSD-059 (10/15/08) (CCN 188217) TN 24590-06- 03753	Direction to Implement New Justification for Continued Design, Procurement, and Installation (JCDPI) (M152)	164
Modification No. M090 & 09-AMD- 205 (07/18/08) (CCN: 202423) TN 24590-06-	Direction to Implement DOE 205.1A, Cyber Security Management Program (155)	217
02145 & - 02381 Modification No. M154 TN 24590-06- 04133	Direction to Implement Pretreatment Engineering Platform (PEP) dry layup (155)	167
Modification No. M196 BCP 24590-06- 04489 BCP 24590-06- 04784 BCP 24590-06- 05085	Direction to Implement Multiple Operational Readiness Strategy (218)	282
Modification No. M196 BCP 24590-06- 04853 ORP 10-AMD-139 (05/06/10; CCN: 218244)	Direction to Implement CXP Equipment Option (218)	317
Modification No. 221 ORP 11-WTP-219 (06/17/11; CCN: 236247); Modification No. 247 ORP 11-WTP-	Direction to Proceed with Large Scale Testing (221, 247, 264, 286)	299 - 384

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437 (12/01/11; CCN: 242351); Modification No. 264 ORP 12-WTP- 0109 (03/15/12; CCN: 245985); Modification No. 286 ORP 12-WTP- 317 (09/24/12)		
Modification No. 273	Direction to participate in the Hanford Site Organizational Climate and Safety Conscious Work Environment (SCWE) Survey	290
Modification No. 245 ORP 11-WTP-429	Direction to proceed with the implementation of DOE Order (O) 420.1B, Facility Safety, Chapter V, Systems Engineer Program. (245)	276
Modification No. 300 ORP 13-CPM-0099 (05/06/13); Modification No. 304 ORP 13-CPM-0133 (06/05/13); Modification No. 313 ORP 13-CPM-0299 (11/25/13)	Direction to Proceed with Full Scale Vessel Testing Program in lieu of the existing Computational Fluid Dynamics and Large Scale Vessel testing Program as a Design Verification Tool (300, 304, 313)	384
Modification No. 329 ORP 14-CPM- 0172	Direction to proceed with Section C, Statement of Work, Standard 3 Design, paragraph (i) Design of BOF Utility Modifications	350
Modification No. 330 ORP 14-CPM- 0181	Direction to proceed with Section C, Statement of Work, Standard 3 Design, paragraph (j) Design of BOF Effluent Management Facility	350
Modification No. 334 ORP 14-CPM- 0228, ORP 15- CPM-0300 (358) 16-CPM-0088 (372)	Direction to proceed with Pretreatment Facility vessel mixing design verification.	384
Modification No. 339 ORP 15-CPM- 0008	Direction to proceed with Section C, Statement of Work, Standard 3 Design, paragraph (k) Design of Balance of Facilities Underground and Site-Wide modifications necessary to support the Direct Feed of LAW (DFLAW)	350
Modification No. 342 ORP 15-CPM- 0064, ORP 16- CPM 0012 (364)	Direction to proceed with the implementation of DOE Order 433.1B, Maintenance Management Program for DOE Facilities and DOE/RL-92-36, Hoisting and Rigging Manual. (342)	384
Modification No. 344 ORP 15-CPM- 0092	Direction to proceed with initiation of procurement of BOF modifications and LAW Valve Vault materials to support DFLAW; add Interface Control Documents 30 and 31	384
Modification No. 348 ORP 15-CPM- 0128	Direction to proceed with initiation of BOF isolation construction to support DFLAW	384

Modification No. 349 ORP 15-CPM- 0136	Direction to proceed with the implementation of DOE Order 414.1D, CRD, Chg. 1, Quality Assurance. (349)	454
Modification No. 354 ORP 15-CPM- 0195, ORP 16- CPM-0154 (380)	Direction to proceed with procurement of Effluent Management Facility (EMF) equipment and effluent transfer lines and limited EMF construction (354)	384
Modification No. 371 ORP-16-CPM- 0085,ORP-16- CPM-0091	Conduct supplementary analysis of vessels RLD-VSL-00007 and RLD-VSL-00008 beyond the WTP Code of Record and modify the RLD-VSL-00007 and RLD-VSL-00008 vessel design.	441
Modification No. 375 ORP-16- CPM-0111, 17- CPM-0038, (388), ORP-17-CPM- 0185 (412)	Update the Natural Phenomena Hazards (NPH) Assessment by generating a revised site-specific response analysis and design response spectra for WTP incorporating Hanford site-wide Probabilistic Seismic Hazard Analysis (PSHA) report from PNNL, dated November 21, 2014. (375)	429
Modification No. 381 ORP-16- CPM-0155 (381)	Authorization to proceed with the development of an engineering redraft process for Standard 3: Design (c) (22).	403
Modification No. 385 ORP-16- CPM-0174,ORP- 17- CPM-0181 (411)	Authorization to proceed with the engineering redraft process developed in Standard 3, subparagraph (c) (22) to reclassify the required portions of the LAW C5 ventilation system from non-safety to safety significant as described in 24590-LAW-PL-NS-16-0005 Rev. 0, Safety Strategy Summary Document (SSSD) – Oxides of Nitrogen/Melter Offgas Releases.	426
Modification 389 17-CPM-0044 (389), 18-CPM- 0105 (428)	Authorization to proceed with engineering and nuclear safety activities necessary to implement the changes to engineered safety controls documented in the Caustic Safety Strategy Summary Document (SSSD) under Standard 3, subparagraph (c) (24)	433
Modification No. 397, ORP-17- CPM-0094; 18- CPM-0143 (438)	DOE included a deliverable to implement the CGD extent of condition review and impacts in Section C, Statement of Work, Table C.5-1.1. Deliverables, 7.11) (397)	455
Modification No. 406, ORP-17- CPM- 0151 (406)	DOE Updated DOE Order 232.2A as referenced in Section C, Standard 1, (d)(5)(6) and updated Section J deliverables.(406)	
Modification No. 415, ORP-18-CPM - 0004, 18-CPM- 0105 (428)	CGD Implementation Plan for Parking Lot Items 1, 2, 7, 9, 12 and 17 in Section C, Statement of Work, Standard 7, Environment, Safety, Quality, and Health, (3) Quality Assurance, (ii), d.	443
Modification No. 432, ORP-18- CPM-0123 (432)	Authorized to perform Design and Procurement of the Actuated On/Off Valve as referenced in Section C, Statement of Work, Subsection C.7 Facility Specification, paragraph (a) (3)	453
Modification No. 506	Incorporate changes to the control system interface between the Tank	515

	Operations Contractor (TOC) facilities and Hanford Tank Waste Treatment and Immobilization Plant (WTP) facilities for systems under interface control documents (ICD) ICD-05, ICD-06, ICD-30, and ICD-31, as identified in the CCN-323014	
Modification No. 524	Establish a Training Shift for BNI's completion subcontractor, Waste Treatment Completion Company, LLC, identified in CCN-326136, dated October 14, 2021.	
Modification No. 527	Contract directly with a commercial treatment/disposal company for disposal of liquid effluent waste that does not meet the requirements for discharge to LERF and ETF for processing by Washington River Protection Solutions, LLC, identified in CCN: 324638, dated September 7, 2021.	

14. Reserved

15. Reserved

16. The following advance agreements are incorporated and made a part of this Contract. (130)

Title	References
Offsite Beryllium Medical Exam Costs (130)	CCN: 150302 (06-ESQ-166; 28DEC06)
Relocation Costs Associated with Establishing a Frederick, MD WTP Project Office (130)	Advance Agreement signed by J. J. Short/C. E. Rogers 20JUL06; CCN: 143197
Steps to Bring BNI Billings and DOE Financial System into Agreement (130)	Advance Agreement signed by J. J. Short/C. E. Rogers 24JUL06; CCN: 143195
Costs Related to Safety Award to WTP Construction Site Employees (130)	Advance Agreement signed by T. M. Williams/N. F. Grover 28NOV07; CCN: 169002
Costs Related to WTP College Hire Conference (130)	Advance Agreement signed by T. M. Williams/N. F. Grover 08AUG07; CCN: 169228
Costs Related to Per Diem Expenses for Certain Employees (130)	Advance Agreement signed by T. M. Williams/N. F. Grover 03JUL07; CCN: 169230
Costs Related to Living Away From Home Option (LAFHO) (130) (479)	Advance Agreement signed by T. M. Williams/N. F. Grover 12DEC07; CCN: 169233 Advanced Agreement described in BNI letter CCN: 316138 (479)
Costs Related to Voluntary Protection Program (VPP) (133)	Advance Agreement signed by T. M. Williams/N. F. Grover 20JUN08; CCN: 181338
Costs Related to Per Diem Expenses for Specific Employees July 2008 (134)	Advance Agreement signed by T. M. Williams/N. F. Grover 18JULY08; CCN: 184046

Title	References
Construction Project Review Subsistence (197)	Advanced Agreement described in CCN: 224972 (27Oct10) and approved by R. L. Dawson on 04NOV10; 10-AMD-370 (CCN: 227552)
Costs Related to 2011 Safety Award to WTP Construction Site Employees (285)	Advanced Agreement described in BNI letter CCN: 236919, dated July 26, 2011 and approved by R. L. Dawson in ORP letter 11WTP-264 dated July 29, 2011 (CCN: 238015)
Costs Related to Stipend for Mobile Communication Devices (285)	Advanced Agreement described in BNI letter CCN: 245311, dated September 18, 2012 and approved by R. L. Dawson in ORP letter 12-WTP-0312 dated October 2, 2012 (CCN: 252582)

- 17. Dollar thresholds for obtaining Contracting Officer approval prior to BNI incurring costs for repair or replacement of Government Property resulting from damage, and/or the need for unscheduled nonroutine corrective maintenance/rehabilitation are specified in CCN: 220281, "Contract Section J, Attachment J, Item 17 Thresholds for Repair of Government Property," letter from N.F. Grover to R.L. Dawson, dated August 4, 2010, and are incorporated into this Contract. The Property Administrator is authorized to approve repairs costing less than \$25,000. (136, 145, 186)
- 18. Inclusions from Equitable Adjustment Settlement. The Trends and Baseline Change Proposals listed on Attachment J, "List of Attachments," Subattachment A are specifically included in the Statement of Release with Modification No. A143, and are released from any further equitable adjustment. (143)
- 19. Exclusions from Equitable Adjustment Settlement. The modifications, trends, and Baseline Change Proposals listed on Attachment J, "List of Attachments," Subattachment B are specifically excluded from the Statement of Release with Modification No. A143, and may be eligible for equitable adjustment provided all Contract change requirements are met. (143)
- 20. All emergency-related repairs or emergency-related maintenance on BNI leased facilities less than or equal to \$25,000, no Contracting Officer approval is required. Alterations made to any BNI leased facility greater than or equal to \$100,000, Contracting Officer approval is required (09-AMD-164 dated May 28, 2009; CCN: 200168). **(155)**
- 21. Deviation to FAR 31.205-44 Training and education activity. Costs incurred in connection with Training on Overtime with direct-feed low-activity waste (DFLAW) 24/7 Commissioning Personnel are allowable. This deviation is supported by BNI Business case included in CCN: 286030 and CCN: 315470, and the DOE Senior Procurement Executive revised approval with two (2) conditions:
 - Designated Personnel: This approval applies only to those personnel, as described in the Contractor's revised business case (CCN: 292307) dated 21 September 2016, who are directly assigned to DFLAW, working 24/7 operations.
 - Costs: The maximum costs for overtime compensation relating to training and education that is allowed is \$17.5M

Overtime costs for training of the Commissioning 24/7 personnel are considered allowable costs under the contract subject to other required tests of allowability under the contract, the *Federal Acquisition Regulation*, and the *Department of Energy Acquisition Regulation*. **(384) (476)**

22. Washington State Paid Sick Leave Law (Part of Initiative Measure No. 1433) (457)

- The reasonable and allocable costs and expenses of the Contractor's compliance with Washington State Paid Sick Leave Law are considered allowable costs under this Contract.
- b. The Contract is to be adjusted to reflect actual costs of Contractor's compliance with Washington State Paid Sick Leave Law on an annual basis, following Contractor's submittal of a Request for Equitable Adjustment.

23. Washington State Paid Family and Medical Leave Program

- a. The reasonable and allocable costs and expenses of the Contractor's compliance with Washington Paid Family and Medical Leave Program are considered allowable costs under this Contract.
- b. The Contract is to be adjusted to reflect actual costs of Contractor's compliance with Washington Paid Family and Medical Leave Program on an annual basis, following Contractor's submittal of a Request for Equitable Adjustment.

24. Administrative Leave Guidance for COVID-19 Vaccinations (513)

- a. It is reasonable for EM contractors and subcontractors to grant their personnel who are working on site or on telework to be given up to 4 hours administrative leave per dose to get vaccinated for COVID-19. The leave shall be coded consistent with the individual contractor's current Human Resource system and practices. Contractor and subcontractor personnel who are currently on leave under the special leave authority in CARES Act section 3610 may not be granted additional leave for this purpose. They may receive the vaccine while on their paid "stand by" status.
- b. It is the responsibility of each contractor to document the measures taken to mitigate the potential impacts of the Administrative Leave to cost, schedule, and scope. This allowability is up to 4 hours of leave per dose to get vaccinated for COVID-19. However, only the minimum amount of time necessary for personnel to receive the vaccination(s) shall be allowable, and personnel shall certify their time spent to get vaccinated.
- c. All other guidance in regards to costs associated with COVID-19 apply to this guidance, including reporting and recording of those costs. This guidance is effective January 21, 2021.

SECTION J – LIST OF ATTACHMENTS ATTACHMENT J ADVANCE UNDERSTANDING ON COSTS (143)

Subattachment A

List of Inclusions from Equitable Adjustment Settlement Established in Modification No. 143

Trend No.	Trend Description
TN-24590-05-01906	PNNL Seismic Borehole Drilling Support
TN-24590-05-02086	Hexavalent Chromium Standards
TN-24590-05-02109	Construction Late Adjustments Transfer
TN-24590-06-02119	C&I LAB Safety Program Implementation
TN-24590-06-02121	Ejector Addition to PWD-SUMP-00004
TN-24590-06-02122	BNI Analysis of NWC Vessels
TN-24590-06-02124	Add Under Flange Swab for LAW Swabbing System
TN-24590-06-02125	Revised Ground Motion Criteria for SC-III
TN-24590-06-02126	Elimination of LAW PPJ Annunciator Panels
TN-24590-06-02127	Unanticipated Growth in MET Support and Noise Assess
TN-24590-06-02130	NAR/SHR Tank Separation Berm
TN-24590-06-02131	C&I Datasheet EPPR Restructure
TN-24590-06-02132	Laser Ablation Procurement Budget Reallocation
TN-24590-06-02133	PJV Creep Additional Testing to Eliminate ALARA Concerns
TN-24590-06-02134	Humphries & Assoc. Contract Modification
TN-24590-06-02135	Funding for 12 Each PVP and PJV Valves
TN-24590-06-02136	Add Stack Discharge Sample/Monitor Piping to 3D Models
TN-24590-06-02138	Procedure Compliance Checklists and Isometric Second Checking
TN-24590-06-02139	Impacts due to Unidynamics Bankruptcy
TN-24590-06-02140	WTP Activated Carbon Temperature Modeling and Detection Limit Development
TN-24590-06-02141	Improvement of PWD-SUMP-00040 Leak Detection Capability
TN-24590-06-02142	Redistribution of LBL Production Hours
TN-24590-06-02143	PTF Committed Phase Design for System CXP & HLW Dryer and Melter Flush Lines
TN-24590-06-02144	Increased Effort for MH Packaged Equipment Integrated Testing & Drawing Review
TN-24590-06-02147	LAW Off-Gas Ancillary SCIV Piping
TN-24590-06-02149	Update Documents for HLW Joggles
TN-24590-06-02151	Large Piping Loads to PTF at Elevation 67' - 4
TN-24590-06-02152	C&I Bulk Analysis
TN-24590-06-02153	Establish Planning Packages in Current OTB
TN-24590-06-02154	Termination Settlement for Trentec PO# 24590-QL-POA-ADDH-00005
TN-24590-06-02155	FNM Budget Hours Transfer from Plant Wide to Facilities
TN-24590-06-02156	Plant Design Re-plan TN-24590-06-02157 Large Bore Pipe Support Jobhour Adjustment
TN-24590-06-02164	HEPA Filter Equipment & Flow Meter Line Changes
TN-24590-06-02166	Remote Operated Damper Alternate Supplier
TN-24590-06-02167	C&I Hours for PJM Testing Not Implemented in TN-24590-05-01957
TN-24590-06-02168	BOF Glass Former Facility Additional Formwork & Concrete
TN-24590-06-02170	SRNL-XRF
TN-24590-06-02174	Increase Scope of EFRT M4, Commissioning Waste vs. Mission Needs
TN-24590-06-02176	Systematic Approach to Training (SAT)
TN-24590-06-02177	Plant Design Impacts Associated with Engineering of LBL Facility Plant Design Impacts Associated with Engineering of BOF Facility
TN-24590-06-02178	
TN-24590-06-02179	Plant Design Impacts Associated with Engineering of LAB Facility Coupled Analysis of Two Typical Breakpots
TN-24590-06-02180 TN-24590-06-02181	Add Additional Hours to PT Process Calcs
TN-24590-06-02181	Add Additional Hours to PT Process Calcs Accelerated Data Reconciliation
TN-24590-06-02182	Process Operations Actions to Close DOE Oversight Open Items
TN-24590-06-02184	IT 14 Implementation
TN-24590-06-02186	LAW Line List Development & CIS List Comparison Macro
TN-24590-06-02187	Equipment Group Increased Deliverable Quantities
TN-24590-06-02189	Modification of MV Switchgears and Load Centers
TN-24590-06-02190	Environmental Performance Test Plan, Process Engineering Calculations
TN-24590-06-02191	Change Offgas Pipe from CM to Q Classification
TN-24590-06-02191	Review of Existing and Future Awarded Commercial Grade Dedication (CGD)-related Procurements
TN-24590-06-02193	Reduction of LAW Cable Tray Baseline based on Qty Awareness
114-24090-00-02193	Neurotion of LAVY Cable Hay Daseline based on Qty Awareness

Trend No.	Trend Description
TN-24590-06-02194	Mechanical Handling Diagrams (MHD)/Mechanical Sequence Diagrams (MSD) Hour Adjustment
TN-24590-06-02195	CFD Analysis - LAW & HLW for HVAC, CSA, MH - Phase 2
TN-24590-06-02197	Multi-Discipline EN&S Support (for ISM Reviews) - 101F Accounts
TN-24590-06-02199	DOE ORDER 413.3A - Estimate to Perform Impact Analysis
TN-24590-06-02201	Overblow (OB) Equipment Modifications to Support Revised Design Requirements
TN-24590-06-02202	Chiller Compressor Building Fire Protection
TN-24590-06-02204	Conversion of PP to WP for Stairway Installation at PT
TN-24590-06-02205	Late Adjustments Planning Package to Equipment Package Budget Reallocation 24590-QL-MEEM- 00001 & 2
TN-24590-06-02206	Increase Cost of LAW C3V-ACU-00001, 00002, 00003
TN-24590-06-02208	Revise Criticality Safety Evaluation Report & Supporting Analysis
TN-24590-06-02211	Late Adjustment Planning Package to Equipment Package Budget Re-allocation PO 24590-QL-POA-MJKG-00004
TN-24590-06-02212	Accelerate CHAMPS Software Purchase. Transfer Budget from Planning Pkg to Work Pkg
TN-24590-06-02213	Conversion of REA Preparation Planning Package to Work Package
TN-24590-06-02215	HPAV Support Contracts for Detonation Analysis and Configuration Management
TN-24590-06-02217	BOF Construction Hours to Support Piping Design Changes
TN-24590-06-02218	Late Adjustments Planning Package to Equipment Package Budget Reallocation for Flowserve Bulge Valves
TN-24590-06-02219	LAPP to Equipment Package Budget Reallocation for Framatome Delay Claim
TN-24590-06-02220	Conversion of DOE Order 226.1 Implementation of DOE Oversight Policy Planning Pkg to Work Pkg
TN-24590-06-02221	Forward Pricing Rates (FPR) (Aug-2006)
TN-24590-06-02222	Cost Increase to M-12 Original Scope, Undemonstrated Leaching Processes
TN-24590-06-02224	10 CFR 851 Implement Worker Health and Safety Rule PP to WP
TN-24590-06-02225	Conversion of DOE Order 414.1C & NQA-1 Rev 2000
TN-24590-06-02226 TN-24590-06-02227	Perform Qualification of Vendor Supplied Leak Detection Box - PT Removal of Sealing Tapes from Pipe Ends and Flanges - PT
TN-24590-06-02228	Removal of Sealing Tapes from Pipe Ends and Flanges - PT Removal of Sealing Tapes from Pipe Ends and Flanges - HLW
TN-24590-06-02229	LAW Quantity Adjustment per the Latest Qty Takeoff
TN-24590-06-02230	Removal of Sealing Tapes from Pipe Ends and Flanges - LAW
TN-24590-06-02231	Direct Hire Craft Support for LAW Coatings Subcontract
TN-24590-06-02232	LAB Hotcell Surface Preparation
TN-24590-06-02233	Removal of Sealing Tapes from Pipe Ends and Flanges - LAB
TN-24590-06-02234	Removal of Sealing Tapes from Pipe Ends and Flanges - BOF
TN-24590-06-02235	Increased Attenuation for Six HLW Shield Windows
TN-24590-06-02239	414.1C QA Implementation Estimate Reduction
TN-24590-06-02241	BOF Quantity Adjustment per the Latest Drawings IFC
TN-24590-06-02242	LAB Quantity Adjustment per the Latest Drawings IFC
TN-24590-06-02243	Plant Wide EPCC: FNM Work Package/Planning Package Allocation
TN-24590-06-02244	Alignment of COBRA end-dates with P3 Schedule
TN-24590-06-02245	Moving Budget Out of LAPP into WP for ASX System Re-evaluation
TN-24590-06-02247	Support for DWP Public Comment Period
TN-24590-06-02248 TN-24590-06-02249	Re-allocation of Remaining FY 2006 PEM Late Adjustments Planning Package Budget Bechtel Internal Cost due to Hirschfeld Request for Equitable Adjustment
TN-24590-06-02250	Re-alignment of Plant Equipment Spend Profile - Critical 7
TN-24590-06-02251	LAW Summary Work Package/Planning Package Re-alignment
TN-24590-06-02252	BOF Summary Work Package/Planning Package Re-alignment
TN-24590-06-02253	LAB Summary Work Package/Planning Package Re-alignment
TN-24590-06-02256	Move Late Adjustment Planning Packages (PP) and Transition PP to Work Packages
TN-24590-06-02257	Mechanical Systems HPAV Calculations
TN-24590-06-02261	Increase Size of Viewing Windows in Select Doors
TN-24590-06-02265	Revision of Procedures and Guides for Nuclear Safety and Quality Initiative
TN-24590-06-02266	Subcontractor EAC Adjustment due to Schedule Delay
TN-24590-06-02267	AFA Antifoam Effect on Gas Retention/Release
TN-24590-06-02269	PTF Hot Cell Fire Analysis
TN-24590-06-02270	HLW C2/C5 Confinement
TN-24590-06-02271	PTF Addition of Safety Class Differential Pressure Alarms
TN-24590-06-02272	Complete SFA with Subcontractor Support
TN-24590-06-02276	Freight BCWS Adjustment Implementation of Sunflower Software System for Property Mat
TN-24590-06-02285 TN-24590-06-02288	Implementation of Sunflower Software System for Property Mgt Additional Vendor Package Interconnection Diagrams
TN-24590-06-02289	PT Modifications to Provide Access for Routine Maintenance of Shield Door
TN-24590-06-02291	Vessel Design Changes - MOB, HPAV, Committed Design Evolution
114 27000 00-02201	T voods Design Undinges INIOD, Til Av, Oommitted Design Evolution

Trend No.	Trend Description
TN-24590-06-02292	Subcontractor EAC Adjustment to Comply with ASCE 97-8 Classification
TN-24590-06-02299	Re-allocation of Fiscal Years 2008 and 2009 PEM Late Adjustments Planning Package Budget
TN-24590-06-02300	Functional Verification of Crane Mounted Manipulator Dexterity
TN-24590-06-02303	Re-alignment of Plant Equipment Spend Profile - Critical 4
TN-24590-06-02306	LBL Re-Sequencing TN-24590-06-02307 Capacity Modifications - 4 Month Earnable Hours
TN-24590-06-02308	Support Steel for Fire Risers in HLW Stairwells
TN-24590-06-02310	Modification of RWH-CRN-00013 to Eliminate Interferences with Monorail Airlocks
TN-24590-06-02311	Plant Equipment to Management Reserve Budget Reallocation
TN-24590-06-02312	LAW Export Bay-Individual Wall Form Installation/Removal
TN-24590-06-02313	LAW Field Rebar Support Frame Fabrication
TN-24590-06-02314	LAW Decontamination Unit and Glove Box - On Site Assembly
TN-24590-06-02315	LAW AHU Installation Delay due to Late Implementation of Transition Frames Design
TN-24590-06-02317	Post IFC Document Revision Activities
TN-24590-06-02318	System HSH Decontamination Tanks
TN-24590-06-02319	Labor to ODC Conversion (Process Operations)
TN-24590-06-02320	Re-align E4 Labor Distribution and ODC Travel Allocation
TN-24590-06-02322	Additional Engineering and E&NS Training
TN-24590-06-02324	Estimate to Implement DOE Order 210.2 Corporate Operating Experience Program
TN-24590-06-02326	LAB Steel Quantity Mix TN-24590-06-02328 Professional Services of SAIC
TN-24590-06-02334	Hirschfeld Steel REA's-May 2006 HLW LAPP Budget to LAW Working Package
TN-24590-06-02335	Vent Stack Restraints Field Modification
TN-24590-06-02338	Process Engineering Support for the WTP Project
TN-24590-06-02339	LAB Structural Steel Field Modification required from ORP Peer Review
TN-24590-06-02341	CM-MRA-EK00-00001 - 480V Load Centers - Add Equipment Budget and Re-Align Schedules
TN-24590-06-02342	Modification to LBL Resequencing BCP that will Correct End Dates for Project Controls
TN-24590-06-02343	HLW Annex Roof SC-1 Equipment Hardening and Screening
TN-24590-06-02344	Engineering Discipline Support for Component Identification System (CIS)
TN-24590-06-02346	Elimination of SLATE Software Maintenance (PIP E160)
TN-24590-06-02348	SQ Addition of Welding and Electrical Technical Specialists
TN-24590-06-02349 TN-24590-06-02350	Budget Shortfall for HLW ISA Vessels
TN-24590-06-02352	LAB 480V MCC's Upsize Cable Lugs for (4) MCC's in Fabrication Convert \$1.5M from QA PP to QA WP
TN-24590-06-02353	LAW Additional Field Rebar Fabrication Quantity
TN-24590-06-02354	Redistribute Radiological Safety ODC Support Budget
TN-24590-06-02356	C/CP Bldg 82 Electrical Safety Upgrade from NEMA 1 to NEMA 12 Enclosures
	Reallocation of Plant Material Budgets due to Implementation of To-Date Quantities Received Earning
TN-24590-06-02359	Basis
TN-24590-06-02361	BOF Pump House Sidewalks Installation
TN-24590-06-02362	LAB Monorail and Recovery System
TN-24590-06-02363	LAW Planning Package Definitization
TN-24590-06-02365	LAB in Slab, Below Slab & In-Cell Pipe Installation
TN-24590-06-02366	Emergency Diesel Generator Re-design
TN-24590-06-02367	Additional PJM Testing - Multiple Overblows and I&C Equipment Testing
TN-24590-06-02368	Melter Feed Studies - Additional Tank
TN-24590-06-02369	LAW Bogie Rail Trend due to New Grouting Requirement-Epoxy Grout
TN-24590-06-02370	Remove Budget for ABB Technical Services Subcontract from Equipment Work Packages
TN-24590-06-02371	BOF Planning Package Definitization
TN-24590-06-02372	LAB Planning Package Definitization
TN-24590-06-02373	Consulting Agreement for Fire Protection of HEPA Filters
TN-24590-06-02374	Alignment of Cobra Dates with LBL Resequencing OTB Schedule
TN-24590-06-02376	Align PO Value Due to Escalation, Schedule Extension, & New Scope
TN-24590-06-02379	Phase 2 - Large Scale Gas Retention / Release (in the presence of anti-foam)
TN-24590-06-02380	LAW Shield Door Additional Coating
TN-24590-06-02384	Seismic Qualification of SC-I/II/III Equipment
TN-24590-06-02385	Underground Cable Size Increases
TN-24590-06-02386	RGM and Other Steel Changes Requiring New SASSI Run
TN-24590-06-02387	LAW Coatings Budget Tochnology Poorlings Level Assessment/CRESP (Miss ORP Driven Povious)
TN-24590-06-02388	Technology Readiness Level Assessment/CRESP (Misc ORP Driven Reviews) RF Resin Stage 2 and 3 Testing Budget Re-alignment
TN-24590-06-02391 TN-24590-06-02392	Safeguards and Security Budget Re-alignment
TN-24590-06-02393	HPAV Design Confirmation Studies
TN-24590-06-02394	LAW Monorail Alignment and Pour Cave Radiation Shielding Installation
TN-24590-06-02395	New C2 Duct added to BSA in LAW
114 2-1000 00-02000	Non-OL Duck added to Dork in D.W.

Trend No.	Trend Description
TN-24590-06-02396	Continue Procurement of Concrete Related Items due to Schedule Extension
TN-24590-06-02397	Storage of Shield Windows (PT, LAW, HLW, and LAB)
TN-24590-06-02398	Jib Crane Design Evolution
TN-24590-06-02399	MH014 - Change of Design Scope for HSH Slewing JIB Coverage
TN-24590-06-02400	Addition of Eight 10.5 inch Shielding Plugs for Black Cell Access Penetrations
TN-24590-06-02401	STR Support of Fireproofing of Structural Steel
TN-24590-06-02402	PTF Internal Replanning
TN-24590-06-02404	LAB Roofing and Siding Subcontractor Delay and Acceleration
TN-24590-06-02405	LAW Schedule Delay of Roofing and Siding Subcontractor
TN-24590-06-02406	Conversion of Sprinkler System to Dry Pipe/Nitrogen in LAB Hot Cell
TN-24590-06-02407	Government Property Organization Staffing Trend
TN-24590-06-02410 TN-24590-06-02411	LAB Subcontractor Support Job Hour Fireproofing Structural Steel Design Changes
TN-24590-06-02417	HLW HVAC Subcontract Replanning
TN-24590-06-02411	Support to DNFSB
TN-24590-06-02422	Operational Readiness - Late Adjustment Detailed Estimate
TN-24590-06-02424	LBL Resequence Estimating Corrections - Transfer to MR
TN-24590-06-02426	2007 Execution Revision
TN-24590-06-02428	LAB Design Quantity Changes from Budget for Elevated Slab
TN-24590-06-02429	QL-POA-ADDH-00007 Change Requirements to Awarded Contract
TN-24590-06-02430	WTP Assessment of Latest Seismic Boring Data
TN-24590-06-02432	MH Equipment Supplier RGM Scope Reduction
TN-24590-06-02433	PTF Floor Penetration Modules
TN-24590-06-02434	PT Room P-0332B Shield Wall Changes
TN-24590-06-02435	HLW Crane Configuration Changes
TN-24590-06-02436	Partition Wall Structural Calculations for HVAC Transfer Ducts
TN-24590-06-02438	Plant Design Support to RGM Workscope
TN-24590-06-02439	Addition of Pretreatment Hot Cell Crane
TN-24590-06-02440 TN-24590-06-02441	HEH Cask Lidding Configuration Rebar Detailing Continuation of Services
TN-24590-06-02441	Align PO Value for Vessel Vent Caustic Scrubber - New Scope
TN-24590-06-02443	Convert CS&A Hours ODC for TSC
TN-24590-06-02445	Construction Subcontract Data Trace Resolution
TN-24590-06-02447	Concrete Bulks Estimate Adjustment for Central Pre-Mix (CPM) Schedule Extension
TN-24590-06-02448	LAW Fireproofing Repairs
TN-24590-06-02450	Moving Approved Sunflower Hours From B0 to B1
TN-24590-06-02452	Addt'l Coating Requirements for LVP & HOP Carbon Bed Adsorbers
TN-24590-06-02456	Instrument Tubing Clamps
TN-24590-06-02460	Establish Process Engineering & Technology Organization
TN-24590-06-02463	Early LBL - Hot Commissioning
TN-24590-06-02464	HPAV Design Authority Revision
TN-24590-06-02465	PJM Mixing and Multiple Overblow Control
TN-24590-06-02466	Distribution of Auto-Sampler System (ASX) LAPP, including Change to Bi-Directional Carrier System
TN-24590-06-02467 TN-24590-06-02468	Capacity Mods [1] [BCP-2307-Must Take Out 13,162] PTF Capacity Mods Undemonstrated Leaching [2 - 8]
TN-24590-06-02469	PTF Capacity Mods Oridemonstrated Leaching [2 - 6]
TN-24590-06-02470	HLW Mod 1 Modifications to Support 7.5 MTG/Day Increased Capacity Throughput
TN-24590-06-02471	EFRT (M1 & M6) Implementation of Design Changes to Prevent Line Plugging
TN-24590-06-02472	EFRT (M3) Inadequate Vessel Mixing
TN-24590-06-02473	Materials Management Organization Startup
TN-24590-06-02475	Allocate ODC Budget for Testing of Grouted Rebars & Anchors
TN-24590-06-02476	LAW Architectural Post-IFC Budget
TN-24590-06-02477	EFRT M14 IX Resin and Related IX EFRT Activities
TN-24590-06-02478	M-12, Mod 3: Front End Leach Capacity, with Option 1
TN-24590-06-02479	LAW Partition Wall Changes
TN-24590-06-02480	Design Change to LMP System for LAW Facility
TN-24590-06-02482	Review of Intools LBL Process Data
TN-24590-06-02483	Extra storage cost NW Copper vessels thru Sept 07
TN-24590-06-02488 TN-24590-06-02490	FY07 Budget Alignment for Duratek Tasks 1 through 7 Increased Work Scope for the LOP System in LAW
TN-24590-06-02490 TN-24590-06-02491	BOF Coating Subcontractor Support Job Hour
TN-24590-06-02491	PT and HLW Coating Subcontractor Support Job Hour
TN-24590-06-02494	Chiller Compressor Building Pipe Rack Coatings Budget
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Trend No.	Trend Description
TN-24590-06-02495	Consolidation of N102A Remaining Hrs
TN-24590-06-02496	Crane Rail Splice Welding
TN-24590-06-02498	EFRT Issue M3 Program to Determine Adequacy of WTP Pulse Jet Mixer Design
TN-24590-06-02499	Line Plugging (M1)
TN-24590-06-02501	Closeout of QL-POA-ADDH-00002 Due to Unidynamics Bankruptcy
TN-24590-06-02502	Commissioning Simulants - Revision to Schedule
TN-24590-06-02503	Mixing Vessel Erosion (M2)
TN-24590-06-02504	Revise Environmental Risk Assessment per EPA Guidance & Obtain 1 Yr Air Model Data
TN-24590-06-02505 TN-24590-06-02506	Fire Protection T-52 Warehouse Redesign Develop Dynamic Analysis Program for PTF HVAC Design
TN-24590-06-02509	Project Controls Increased Support Requirements
TN-24590-06-02510	EVMS Certification / CAR Resolution Impacts to Project Controls
TN-24590-06-02512	Additional HLW ITS Cooling for Fan Rooms
TN-24590-06-02513	HVAC Piping and Valve P&ID
TN-24590-06-02515	Plant Design Miscellaneous Conceptual Design Studies
TN-24590-06-02517	BOF Miscellaneous Piping Field Modifications
TN-24590-06-02521	Thermal Catalytic Oxidizer and Silver Mordenite Preheater Work Scope Change
TN-24590-06-02525	Refrigerant Lines for Remote Condensors
TN-24590-06-02526	LAW Carbon Dioxide Storage Vessel Quality Change
TN-24590-06-02530	Mitigate Water Droplet Formation at LAW LVP Stack
TN-24590-06-02531	BOF Safety Shower Water Temperature
TN-24590-06-02532	Safety Control Instrumentation / SSRS Additional Work and Unit Rates
TN-24590-06-02534	Early Energization of Cathodic Protection Systems
TN-24590-06-02535 TN-24590-06-02540	Environmental Qualification Manhours for all Facilities DOW Booster Pump Removal in PTF and LAW
TN-24590-06-02543	PTF Evaporators - AREVA
TN-24590-06-02547	Reconciliation of PNNL Stack Qualification Budget
TN-24590-06-02550	CM-MRA-EL00-00009, LAW Lighting Fixtures
TN-24590-06-02551	HLW Melter Pour Spout Design
TN-24590-06-02555	Additional Engineering Hours for HVAC Environmental Qualification
TN-24590-06-02556	Re-bid of Ammonia MR #24590-QL-MS00-00008
TN-24590-06-02557	Changes to PTF Bulges / Cabinets and Bulk Valve Order
TN-24590-06-02558	Addition of Steam Traps and Strainers to BOF SCW P&IDs
TN-24590-06-02559	Generate Equipment Loads for Near-Term PTF/HLW Concrete Design
TN-24590-06-02560	New MR for Blanket Order of Distribution Panelboards and Transformers
TN-24590-06-02565	Startup LAW RWH-CRN-00008 for Beneficial Use by Construction
TN-24590-06-02567	SS Resequence Corrections and Additional Staffing Needs
TN-24590-06-02575 TN-24590-06-02579	HLW Floor Preparation for Special Coatings LAW Process and Effluent Cell Vessel Shims/Plates/Bars
TN-24590-06-02582	LAW First Conceptual Design Report, Revised Basis of Design, & Negotiate ICD Agreement
	CM-MRA-AELE-00009 / QL-MRA-AELE-00009 Material Requisition Schedule Activities PREF Codes
TN-24590-06-02584	Correction
TN-24590-06-02586	Additional Coatings for WTP Equipment
TN-24590-06-02588	Six Sigma PIP - Reviewing FCR/FCNs and NCR/CDRs
TN-24590-06-02589	Calculations Resulting from CAR-06-250 Action # CAR-25-5
TN-24590-06-02590	Increase in Design Review Notice and Design Verification Activities
TN-24590-06-02591	Budget Realignment for Duratek Melter Feed Studies
TN-24590-06-02593 TN-24590-06-02595	LAW Miscellaneous Structural Steel Modification Additional Staffing for Acquisition Services B1
TN-24590-06-02597	Consolidation of MS Equipment EPPR Accounts
TN-24590-06-02599	B7 Subcontracts - Increased Staff
TN-24590-06-02600	HLW El. 14' Steel Changes
TN-24590-06-02603	BOF Shrink Sleeve Replacement
TN-24590-06-02606	Additional C3V HEPA Housing
TN-24590-06-02607	Permanent Cranes - Radio Frequency Allocation
TN-24590-06-02609	Budget for New & Existing Material Requisitions for C&I
TN-24590-06-02610	Transfer of HLW and LAW Spare Melter Budget from Commissioning to Engineering
TN-24590-06-02612	Battelle/PNNL Contract Conversion
TN-24590-06-02614	BCP HLW Film Cooler (M17)
TN-24590-06-02618	Steam Sys. & High Energy Line Study-CRPT-QA-06-218 Actions
TN-24590-06-02619	EVMS Compliant Control Account Structure
TN-24590-06-02621	Definitization of DOE Order 226.1, Implementation of DOE Oversight Policy
TN-24590-06-02624	Process Limits Definition (M6) R&T Activities

Trend No.	Trend Description
TN-24590-06-02625	Radar Polypropylene Window Additions
TN-24590-06-02630	Sanitary Sewer O&M Manual Revision
TN-24590-06-02631	Modify Leak Detection System for LMP-LDB-00001 & 00002
TN-24590-06-02633	CAR 2 Corrective Action Phase I - Reverse Implemented PEM Claims Budget WPs to MR
TN-24590-06-02634	CAR 2 Corrective Action Phase II - Reallocate PEM Remaining Claims Budget LAPP to MR
TN-24590-06-02636	Bus Duct Related Rework and Inefficiencies
TN-24590-06-02637	SQ Shift-Transfer of ODC 89 into Direct Hire 1313
TN-24590-06-02639	Humphreys & Assoc. Increase
TN-24590-06-02641	Automated Flush to Bubbler Racks for LAW and HLW Facilities
TN-24590-06-02643	Transfer of Remaining Budget in 1.08 EQ to Other Accounts
TN-24590-06-02644 TN-24590-06-02646	LAW Miscellaneous Piping Changes Review of DOE Order 420.1B for Impacts to WTP
TN-24590-06-02648	LAW Removal of Fireproofing and Rework due to NLD Dwg Changes
TN-24590-06-02649	BCP Transfer Budget from PP to WP
TN-24590-06-02650	Transfer of Process Engineering & Flowsheet Modeling Scope from Engineering Mgt Account
TN-24590-06-02652	BCP EFRT Budget Re-distribution
TN-24590-06-02654	Develop Standard CM Cable Tray/Conduit Support Detail Dwgs and Model Raceway Supports in PTF
TN-24590-06-02655	3D Model 4-Month DOE ORR to 2-Month DOE ORR
TN-24590-06-02658	LAW/LAB Fabrication Isometrics
TN-24590-06-02660	Fabricated Panel Order - New Material Requisition
TN-24590-06-02662	Align Work Packages with the Correct Control Accounts
TN-24590-06-02664	Transfer E&NS Budget from Planning Packages to Work Packages
TN-24590-06-02665	Create 1.08.HH-PW LOE Control Acct & Req'd OBS Change E&NS
TN-24590-06-02666	BCP-Create 1.08 DL PW LOE Control Acct for Eng
TN-24590-06-02670	HVAC PP to WP Conversion
TN-24590-06-02671	BCP CAR 05 (BCP not taken the same manner as BCWS) Closure
TN-24590-06-02672	Coupled Analysis of PTF and HLW Filter Caves
TN-24590-06-02673	Modifications to LAW as a Result of Environmental Qualification
TN-24590-06-02675 TN-24590-06-02677	Change to PSA System & Addt'l Piping for LAW Steam Systems Time Related Costs for Execution Strategy Revision
TN-24590-06-02677	Resolution of Process Engineering Confirmed Calculation Budget
TN-24590-06-02682	Revise Panel to Implement 3 Pole Breakers Multi-Wire Branch Circuits
TN-24590-06-02683	Upgrade of Plant Fiber Optic Cable for Distance and Bandwidth
TN-24590-06-02684	Implementation of Pipe Support ABAR into Criteria, Guides, and Standard Calculations
TN-24590-06-02685	Stelite Cone and Ring Beam NDE N690 Redesign
TN-24590-06-02686	Review of Vendor and Other Discipline Documents
TN-24590-06-02687	Overflow Calculations Resulting From CRPT-05-140
TN-24590-06-02688	AEA Manipulator Tool Power/Removal Changes 490 Curtailment Cost/Schedule Delays for Power Manipulators Remobilization
TN-24590-06-02689 TN-24590-06-02690	PVP Header Pressure
TN-24590-06-02691	LVP-SCB-00001 Design Scope Change
TN-24590-06-02693	HLW Decon Pit Shield Limits
TN-24590-06-02696	24590-QL-POA-MEEM-00001 Schedule Change Melter 1 - LAW
TN-24590-06-02697	BCP Budget Trans Matl PP 4MT-081960-PP to GE-Ionics
TN-24590-06-02698	HLW Mod 2 - Plant Components for Potential Future HLW Concentration Annex
TN-24590-06-02699	PTF AB Design Review Support
TN-24590-06-02700	Engineering Support to Melter Fabrication
TN-24590-06-02701	P&ID Enhancement Program
TN-24590-06-02702	DOE Order 413.3 LAPP Savings and Configuration Mgt of Vendor P&I's BCP - LAW Hydrogen LAPP to PP
TN-24590-06-02703 TN-24590-06-02707	LAW Container Overpack/Elevator Cooling Modifications
TN-24590-06-02707	CSA Support to WTB Pipe & Cable Tray Supports
TN-24590-06-02710	Ultrafilter Drain Cleanout Demonstration Testing
TN-24590-06-02711	LAW Piping Commodities Forecast Revision
TN-24590-06-02713	Incorporation of Revised Standard 1 - Cost Estimate
TN-24590-06-02715	Equipment PP Transfer from MAR 07 to MAY 07
TN-24590-06-02717	Commissioning PP Transfer from MAR 07 to APR 07
TN-24590-06-02718	LAB Structural Steel Pricing Revisions
TN-24590-06-02719	LAW Pour Cave Cooling Panel Installation
TN-24590-06-02721	Support Services Additional Lease Space
TN-24590-06-02723	Increased CDF Backfill Quantities / Melter Assembly Pad Electrical Changes
TN-24590-06-02724	Additional HVAC Subcontract Support Craft Hours

Trend No.	Trend Description
TN-24590-06-02725	Replace Installed Unscheduled Cable/Welding Receptacle Insta
TN-24590-06-02726	SS Resequencing Correction- Support Services Labor
TN-24590-06-02727	Create Additional Control Accounts for PT & HLW
TN-24590-06-02729	LAB Steel Quantity Mix (New changes from OCT 2006 QDP)
TN-24590-06-02730	Air Inbleed for LAW LOP Film Coolers
TN-24590-06-02731	Rad Transfer Lines Shrink Wrap Analysis
TN-24590-06-02732	Increased Receiving Inspection Work Load (B6)
TN-24590-06-02735	Melter Feed Studies Task 8 - Schedule Re-baselining and Additional EFRT Scope
TN-24590-06-02736	Lease Rate and Co-Location impacts to Support Services
TN-24590-06-02737	Fire Modeling of Selected Areas of WTP Facilities
TN-24590-06-02738 TN-24590-06-02739	Miscellaneous Steel Detailing Services Transfer Of Scope From Plant Equipment Group
TN-24590-06-02740	HLW Electrical Joggle Purchase Strategy Change
TN-24590-06-02741	BCP Changes to C&I ID for Work Packages
TN-24590-06-02742	PTF Jumper Material Re-estimate
TN-24590-06-02743	BOF Excavation Unit Rate Adjustment
TN-24590-06-02748	LAW - Additional Transition Frames for AHUs and FCUs
TN-24590-06-02749	Reversal of Plant Equipment Budget from Management Reserve
TN-24590-06-02753	WTP Rebar Density Savings
TN-24590-06-02754	CFD Design Evolution and Delay
TN-24590-06-02755	HDH Decon Vessel Heating System
TN-24590-06-02757	Negotiated Savings - Six Sigma PIP 012
TN-24590-06-02758	LAW Piping Unit Rate Forecast
TN-24590-06-02759	BCP Alignment of Equip Mang System to Baseline Schedule
TN-24590-06-02762	BCP Reallocation of Plant Equipment Scope
TN-24590-06-02763	Physical Configuration Audit for HLW Shield Doors Melter Cave
TN-24590-06-02764	490 Curtailment Suspension Cost Wall Mounted Light/Socket Assemblies
TN-24590-06-02767	Implement ABB Process Control Device Library for ICN Software
TN-24590-06-02768 TN-24590-06-02769	ISARD Revision 4 Delayed Start Additional Engineering Training
TN-24590-06-02770	Criticality Safety HAZOP
TN-24590-06-02771	Convert PP to WP
TN-24590-06-02773	Convert HVAC PP to WP
TN-24590-06-02775	Reversal of Plant Material Budget from Management Reserve
TN-24590-06-02777	Process Engineering and Flowsheet Modeling COBRA Reload
TN-24590-06-02779	HFP Vessels Hydrogen Generation Mitigation Study
TN-24590-06-02781	Distribution of Auto-Sampler (ASX) Phase II
TN-24590-06-02784	LAW PP to WP Conversion
TN-24590-06-02786	Forward Pricing Rates (FPR) (May-2007)
TN-24590-06-02787	Excess Government Property Disposal
TN-24590-06-02790	Removing Freight Budget (B4)
TN-24590-06-02791	Savings LAW Equipment award less than budget
TN-24590-06-02793	Savings Reduction in planned revisions
TN-24590-06-02794 TN-24590-06-02795	Savings LAW & BOF Elec Bulk Commodity Quantity Reduction Savings Potential reduction in RGM EAC
TN-24590-06-02796	Convert Planning Pkg Work Pkg for DOE Order 414.1C
TN-24590-06-02798	BOF Long Term Storage and Setting Chillers
TN-24590-06-02799	BOF Glass Former Slab - Silos and other Equipment
TN-24590-06-02800	Commercial Grade Dedication Activities
TN-24590-06-02801	BCWS Point Adjustment Control Point Repair
TN-24590-06-02802	PATS 618,974,2545,2696,2839 Budget Redist-Follow BCP-02749
TN-24590-06-02803	BSA Compressors - Increase in Chill Water Pressure Rating
TN-24590-06-02804	CM Receipt Inspection Work Scope Shift from Materials Manage
TN-24590-06-02807	EFRT M-17 Film Cooler Redesign and Testing
TN-24590-06-02809	490 Curtailment Suspension Cost for Through Wall Manipulators
TN-24590-06-02810	490 Curtailment Suspension Cost for 13.8 KV Switchgear
TN-24590-06-02811	Change in Contracting Strategy for Penetration Seals
TN-24590-06-02812	Reversal of Budget for DOE M 205.1-2 (IS&T)
TN-24590-06-02813	Referral Bonus Program
TN-24590-06-02815	LAB Additional Activity to Support Deck Slab Extension of Process Engineering Support
TN-24590-06-02816 TN-24590-06-02817	BOF - S/C Insulation and Heat Trace Reschedule
TN-24590-06-02818	Transfer DOE Order 226.1 from PP to Management Reserve
114 2-000 00-02010	Transition BOL Order 220.1 Horit F. to Managoment Nederve

TN-24590-06-02819 HLW El 14 ft to 37 ft Gatepost Milestone Reschedule TN-24590-06-02820 Procurement of Bulk Plate Material TN-24590-06-02822 BOF setting of Dryers TN-24590-06-02823 Design Changes to Conduit Requires an Increase to Direct Hire Job Hours TN-24590-06-02823 Design Changes to Conduit Requires an Increase to Direct Hire Job Hours	
TN-24590-06-02820 Procurement of Bulk Plate Material TN-24590-06-02822 BOF setting of Dryers TN-24590-06-02823 Design Changes to Conduit Requires an Increase to Direct Hire Job Hours	
TN-24590-06-02823 Design Changes to Conduit Requires an Increase to Direct Hire Job Hours	
TN 24500 06 02025 LAW Bour Cove Cooling Bond Cunner	
TN-24590-06-02825 LAW - Pour Cave Cooling Panel Support	
TN-24590-06-02830 Compliance with DOE/WTP Security Requirements at WTP Satellite Offices	
TN-24590-06-02831 LAW Remove Intumescent FP on 14X90 Columns & Reapply with Cementitious	
TN-24590-06-02833 Transfer of LAB Equipment Level 4 Schedule Responsibilities	
TN-24590-06-02836 LAW Melter Slab	
TN-24590-06-02838 LAW Special Coatings PP to WP Conversion	
TN-24590-06-02839 Implementation of 10 CFR 851-Worker Safety and Health Program	
TN-24590-06-02843 Implementation of Official Use Only (DOE Order 471.3 and DOE M 471.3-1)	
TN-24590-06-02844 LAW Melter Lid Calculation Subcontract TN-24590-06-02848 Degraded Anti-Foam and Impacts on Gas Retention/Release	
TN-24590-06-02848 Degraded Anti-Foam and Impacts on Gas Retention/Release TN-24590-06-02850 In-House Rack Design Schedule Alignment	
TN-24590-06-02851 Alignment of PP within the EMS to overall completion dates for the facilities	
TN-24590-06-02852 LAW Planning Pkg to Work Pkg Conversion	
TN-24590-06-02853 Schedule Changes LBL HVAC Design Support Activities	
TN-24590-06-02854 Construction Distribs Budget Increase (June 06 - Mar 07) due to Direct Craft Labor BCPs	s
TN-24590-06-02855	
TN-24590-06-02857 PT Favorable Cost Variance Scope Completion	
TN-24590-06-02859 Add Column Splice at El. 81'	
TN-24590-06-02860 Align BCWS to post ESR Baseline Schedule	
TN-24590-06-02863 Transfer of Operational Risk Assessment Budget	
TN-24590-06-02866 Deferral of CY 2007 Early LAW Conceptual Design Report and Early LAW Commissioning	ng Activities
TN-24590-06-02867 E&NS Support to DNFSB Meetings	
TN-24590-06-02868 LAB Communication Data Drop Additions	
TN-24590-06-02870 New Material Handling Facility and Relocation of Marshaling Yard	
TN-24590-06-02871 HLW Transfer Part of Curtailment Construction Scope to Marshalling Yard	
TN-24590-06-02872 ASCE-4 Modal Combination Piping Reanalysis	
TN-24590-06-02876 Phase II Pre Eng Type A Bldgs (affected facilities BOF, LAW)	
TN-24590-06-02878 LAW Planning Package to Work Package TN-24590-06-02879 LAB Convert Sub-Contract Planning Packages to Work Packages	
TN-24590-06-02879 LAB Convert Sub-Contract Planning Packages to Work Packages TN-24590-06-02882 ICD 19 Reconciliation Trend Study	
TN-24590-06-02883 PP Replan for R&T for PW and PT	
TN-24590-06-02887 Sub-Contracts Planning Package to Work Package Conversion	
TN-24590-06-02888 BOF Motor Starter Planning Package to Work Package Conversion	
TN-24590-06-02889 PT Facility Planning Package to Work Package Conversion	
TN-24590-06-02891 Descoping of Remote Clamp Connector MR	
TN-24590-06-02892 PT Sub-Contract Planning Package to Work Package Conversion	
TN-24590-06-02894 Staff Reduction for LA-ICP-AES	
TN-24590-06-02897 LAW FY07 Gatepost Milestones	
TN-24590-06-02898 RF Testing Cost Under Run	
TN-24590-06-02901 Relay Setpoints and Setting Reports	
TN-24590-06-02902 Movement of LAW Non-Camera Equipment from one L4 Schedule Activity to another	
TN-24590-06-02903 BOF Planning Package to Work Package Conversion	
TN-24590-06-02906 BOF RAD Lines, Insulation of DOE and RAD Lines	
TN-24590-06-02907 Hirschfeld Steel Company Request for Equitable Adjustment - Negotiated Settlement	
TN-24590-06-02908 BOF EFRT Scope Allowance Removal	
TN-24590-06-02909 LAB Hot Cell Trolley System	
TN-24590-06-02911 LAB Concrete Favorable Performance	
TN-24590-06-02912 EMS Level 5 Alignment to Level 4 Baseline Schedule TN-24590-06-02914 Postponement of Diesel Generator Tank Coating Activities	
TN-24590-06-02915 Transfer of Hours to ODCs to Fund BOA Contract	
TN-24590-06-02916 CSA HLW Schedule Revision	
TN-24590-06-02917 NDE Reduction for Welds on Pipework in Hard to Reach Areas	
TN-24590-06-02918 PP Replan for R&T for HLW & LAW	
TN-24590-06-02919 LAW Embed Quantity Reduction	
TN-24590-06-02921 C&I Control Strategy Design Review	
TN-24590-06-02922 Three Part Schedule Logic Correction	
TN-24590-06-02924 Impact of Revised CGD Requirements for the HOP and LVP Carbon Bed Absorbers	
TN-24590-06-02929 M3/M2-Inadequate Vessel Mixing/Erosion	
TN-24590-06-02930 HLW MOD-1 Support for 7.5MTG/day Next Generation Melter Throughput	

Trend No.	Trend Description
TN-24590-06-02932	PTF Capacity Mods Utilities
TN-24590-06-02936	LAB Installation of Floor Mounted Jib Crane
TN-24590-06-02937	HLW HVAC Restart
TN-24590-06-02938	Claim for 222S LA ICP-AES Instrument
TN-24590-06-02940	Budget to Provide Large Scale for Effects of AFA on Gas Retention/Release
TN-24590-06-02941	Technology Maturation Plan IRPs & VE Study Prep
TN-24590-06-02943	M5 and M9 Late Adjustment PP to PP transfer within Commissioning Budgets
TN-24590-06-02946	Conversion of PP to WP Canister Racks QL-POA-SY00-00003
TN-24590-06-02949	Seismic Calc for SC-1 & SC-2 Gypsum Board Walls in PT & HLW
TN-24590-06-02950	Generate Equip Loads for PTF/HLW Concrete Design to Support L4 Schedule
TN-24590-06-02953	Partial Commissioning Distribution of the 1.08 WBS Backflow Preventers
TN-24590-06-02954 TN-24590-06-02955	LAW Swab Manipulator Container Height Adjustment
TN-24590-06-02956	Replan Subcontract Support for Safety Document Maintenance
TN-24590-06-02957	BOF & LAB Equipment Favorable Savings
TN-24590-06-02959	Plant Equipment Non-Negotiated Claim Return to Management Reserve
TN-24590-06-02961	Study for Steam Heating UFP Vessels - EFRT PT M12 changes
TN-24590-06-02962	Cesium Nitric Acid Neutralization
TN-24590-06-02963	ODC's to support E&NS HPAV activities
TN-24590-06-02965	Savings on Silver Mordenite Columns
TN-24590-06-02967	Alignment of LAW Melter Budgeted Cost for Work Scheduled (BCWS) with the existing Purchase Order
TN-24590-06-02968	Implementation of M095 - Add DOE M 442.1-1 (DPO)
TN-24590-06-02972	LAW: Recovery from Unidynamics Bankruptcy and Arch - Roofing and Siding
TN-24590-06-02973	LAW 1) Bulk Installation Package 2) Annex Roof Decking 3) Vent Stack Piping
TN-24590-06-02974	LAW CGD Requirements for the LVP Carbon Bed Absorber
TN-24590-06-02976	Fluidic Devices Jet Pulse Mixers ECAR for QL-POA-MPE0-00002
TN-24590-06-02981	Descoping of Undefined Plant Equipment Planning Packages
TN-24590-06-02982	Startup Impacts Due to Fire Service Water PP to WP conversion
TN-24590-06-02983	Commissioning Impacts Due to Fire Service Water PP to WP Turnover
TN-24590-06-02984	LAW Transition Frames
TN-24590-06-02985	LAW Planning Pkg to Work Pkg Conversion
TN-24590-06-02986	LBL Subcontracts PP to WP Conversions
TN-24590-06-02990	Alignment of HLW Melter BCWS with existing PO QL-POA-MEEM-00002 PP Start Date Correction - ER-BCP-03-PP
TN-24590-06-02993	PP Start Date Correction - ER-BCP-03-PP PP Start Date Correction - ER-BCP-05-PP
TN-24590-06-02994 TN-24590-06-02996	LAW Melter Feed Simulant Replacement
TN-24590-06-02998	HLW Convert PP to WP
TN-24590-06-03001	Commercial Grade Dedication Schedule
TN-24590-06-03002	Subcontract Planning Package to Work Package Conversion
TN-24590-06-03003	CO2 Pelletizers System Design Changes
TN-24590-06-03004	Acquisition Services into Three Control Accounts
TN-24590-06-03008	North Lay Down Yard Relocation
TN-24590-06-03010	IHLW Rescreening of WAI Items and Canister Calculations
TN-24590-06-03012	Engineering Automation Staffing & Training Increase
TN-24590-06-03015	Added 8 Start-Up Flanges for FSW
TN-24590-06-03016	LAW Annex Roofing and Siding Budget
TN-24590-06-03017	Marshalling Yard Consolidation - Labor Savings
TN-24590-06-03019	Commissioning Task Replan
TN-24590-06-03020	LBL Replan
TN-24590-06-03025	Startup Instrument Calibration budget transfer to C&T Maintenance
TN-24590-06-03027	Change logics for Hammock activities for transition to P5
TN-24590-06-03029	M-12 Pretreatment Engineering Platform Utility Increase for Vertical Filters
TN-24590-06-03030	M-2 Additional Testing
TN-24590-06-03032	Savings on West Metals
TN-24590-06-03033	Collection of PJM test Results
TN-24590-06-03035	WTP Project Selective use of WSGM
TN-24590-06-03038	Permit/Risk Assessment Schedule for EFRT/Capacity Modifications
TN-24590-06-03039	490 Curtailment Costs & Schedule delays for Weir Hazleton Feed Vessel Pump
TN-24590-06-03040	Additional REAs to HLW Melter Fabrication
TN-24590-06-03043	Addition of Facility DOW Expansion Tanks
TN-24590-06-03046 TN-24590-06-03047	PP to WP Conversion - Plant Equip Exec Rev Impacts Transfer of Budget and Schedule for ASD Procurement
TN-24590-06-03047	Unsolicited Vendor REA - LAW Melter Spool Connections
114-24330-00-03046	Ousonicited Action LEV - EVA Metre Short Contractions

Trend No.	Trend Description
TN-24590-06-03050	1.08-HH Staffing Variance
TN-24590-06-03051	EFRT Major Issues M15 - Availability, Operability and Maintainability
TN-24590-06-03052	Subcontract PP to WP Conversion
TN-24590-06-03053	Moving PW Warehousing & 2nd waste tracking from PT equipment
TN-24590-06-03056	Savings on Condensate Collection Vessels
TN-24590-06-03057	Startup Impacts Due to Early Energization of Cathodic Protection System - PP to WP Conversion
TN-24590-06-03067	Addition of Process Regulator Scope for LAW & HLW Erroneously Omitted in Bulk Transfer
TN-24590-06-03068	Reallocation of Budget for Elec Work PP in Equip Mang Sys
TN-24590-06-03069	LAW 5-Part Rework
TN-24590-06-03070	HLW Baseline Schedule Logic Corrections
TN-24590-06-03075	PT & HLW Mixing Design Evaluations
TN-24590-06-03076	Material Management Staffing Increase - Non Manual BOF PP to WP and Replan
TN-24590-06-03078 TN-24590-06-03079	Allocating budget into correct WP
TN-24590-06-03080	LAW Convert PP to WP
TN-24590-06-03081	Increased Field Non Manual Requirements for CY08
TN-24590-06-03082	Transfer of CSA Hours to ODCs for ESQ Subcontract
TN-24590-06-03084	BOF - Coating of Pipe Rack Connections
TN-24590-06-03085	LAW Caulking
TN-24590-06-03086	Additional Scope for EFRT Issue M-2 Vessel Erosion
TN-24590-06-03087	LAW Freight Elevator Schedule Delay
TN-24590-06-03091	LAB Change logics for Hammock activities for transition to P5
TN-24590-06-03092	Additional Manhours for Construction Equipment Inspection/Spotters
TN-24590-06-03096	LAB Stack Internal replan
TN-24590-06-03097	Plant Design HPAV Schedule Update
TN-24590-06-03098	Concrete Pump Truck Increased Efficiency PT & HLW Commodity Installs
TN-24590-06-03105	Intools Input Effort - Schedule Correction
TN-24590-06-03111	HFP Overflow Flapper Valves
TN-24590-06-03112	PTF Bulge CRPT-06-219 Issue Resolution
TN-24590-06-03113	OSHA 2 Inch Running Clearance for HLW Maintenance Cranes
TN-24590-06-03114	REA Settlement for Still-Water QL-POA-PF00-00002
TN-24590-06-03116	Adding schedule activities for QL-MRA-MJW0-00003
TN-24590-06-03119 TN-24590-06-03120	Property Management Scope and Budget Transfer from Acquisition Services to Material Management UFP and PWD Vessel Ring Beams Refabrication
TN-24590-06-03121	80% Bulk Material and Equipment Reforecast
TN-24590-06-03122	Assess Impact of Implementing DOE M 470.4-1 and DOE M 470.4-2
TN-24590-06-03128	HLW Schedule Logic Corrections to Construction Schedule
TN-24590-06-03129	Cylinder Bottle Pressurized PP to WP Conversion
TN-24590-06-03133	Create Material Milestones in Primavera
TN-24590-06-03134	PP Replan for HLW and LAW
TN-24590-06-03137	LAB Communications Change to Cable Tray
TN-24590-06-03138	Lifting Beam Specification Revision and Capacity Increase
TN-24590-06-03139	Crane Combustible Inventory Reduction
TN-24590-06-03140	Capacity Mod Impacts to HLW Canister Racks
TN-24590-06-03141	Change HLW HEME Internal Components to Q
TN-24590-06-03142	Potential Reduction in HLW ODC's
TN-24590-06-03144	BOF Maintenance and Janitorial Services for the Simulator Building
TN-24590-06-03145	Replan of To-Go Hours for Developing Testing Admin Procedures
TN-24590-06-03149	Realign MS Schedule for Field Change Documents
TN-24590-06-03150	BOF Glass Former Storage Resequence BOF Site wide Cathodic Protection
TN-24590-06-03152 TN-24590-06-03153	LAB - PP to WP
TN-24590-06-03154	Positive Cost Variance in H3 Accounts
TN-24590-06-03155	Additional Construction Safety Program Costs CY08/09
TN-24590-06-03156	Transfer Budget from Construction Bulks to Subcontractor Fireproofing
TN-24590-06-03157	BOF Subcontractor Cable Identification
TN-24590-06-03158	Flooding Trend (Study Only)
TN-24590-06-03160	Redesign of Cooling System for LAW Melter Lid
TN-24590-06-03161	Pre Eng Type A Bldgs Phase II Cost Increase
TN-24590-06-03162	Transfer Testing of Grayloc's from Equipment to ENG ODC
TN-24590-06-03164	LAW - Revised Bolt Tightening Requirements
TN-24590-06-03166	PT Vessel Subcontract to Direct Hour Conversion
TN-24590-06-03167	New Warehouse Lease Cost

Trend No.	Trend Description
TN-24590-06-03171	HLW Planning Package to Work Package Conversion
TN-24590-06-03173	Purge Air for Hydrogen Mitigation in LAW Vessels
TN-24590-06-03174	Additional Funding for RIO MR# 24590-CM-MRA-JC00-00006
TN-24590-06-03175	Cost Increase & Schedule Delays for HLW CCTV Due to 490 Funding Limitations/Design Evolution
TN-24590-06-03177	Schedule Logic Correction for C&I LAW Confirmed Calculation
TN-24590-06-03178	Down-Trend for HLW Spooled Pipe
TN-24590-06-03179	Implementation of Equipment Qualification Program
TN-24590-06-03180	Broad-Based Review
TN-24590-06-03181	QL-POA-MEEM-00001 Approved ECAR's
TN-24590-06-03183	LAW - Pour Cave Cooling Panels - Monorail Modification
TN-24590-06-03184	LAW Scaffolding Support for Partition Walls
TN-24590-06-03186	QL-POA-MEEM-00002 Approved ECAR's
TN-24590-06-03188	Jumper Data Sheet Schedule Alignment
TN-24590-06-03189	Piping Joggle Transfer of Budget from Concrete Embedments to Plant Material and Pricing Reconciliation
TN-24590-06-03193	Deferral of CY 2008 Early LAW Activities to CY 2009
TN-24590-06-03195	REA Settlements for PaR Systems, Inc.
TN-24590-06-03196	Sub-Contracts Planning Package to Work Package Conversion
TN-24590-06-03198	Engineering Management Staffing Alignment
TN-24590-06-03201	HLW Mods HVAC Design Mitigating Loss of Cooling/Heating Accidents
TN-24590-06-03202	Heavy Lift Crane Mats
TN-24590-06-03206	PTF PP to WP and Clarification of Work Scope
TN-24590-06-03207	Correct omission / error from BCP 06-3004 3 Control Accounts
TN-24590-06-03208	Increase Cost for Severe Weather Doors
TN-24590-06-03209	Impacts to LAW and LAB Coiling Door Subcontract HLW Engineering Impacts from In-Structure Response Spectra (ISRS) Changes
TN-24590-06-03210 TN-24590-06-03212	LAB Steel Quantities
TN-24590-06-03214	PT Hot Cell Crane Rail Beam Addt'l NDE/Weld Rqmts Vendor Supplied Crane Rails
TN-24590-06-03216	Transfer of Production and Added Scope for Software Life Cycle Documents
TN-24590-06-03217	Correction of BCWS in two of PT Equipment Pos
TN-24590-06-03218	Extension of the Material Requisition BEA Cycle
TN-24590-06-03219	Additional Budget Required to Support Evaluation of DOE-STD-1066 Impact on WTP HEPA Systems
TN-24590-06-03220	Glovebox and Posting Machine Schedule Revision due to 490 Funding Limitations
TN-24590-06-03228	Forward Pricing Rates (FPR) (Dec-2007)
TN-24590-06-03229	BOF Site Wide Vacuum Truck
TN-24590-06-03230	PTF Internal Replan Concrete
TN-24590-06-03231	BOF Pipe/Water Treatment Bldg. Concrete Trend
TN-24590-06-03233	LAW Fire Protection Obstruction Corrections
TN-24590-06-03234	BOF PP to WP conversion
TN-24590-06-03236	PT - Enclosure of stairwells & North Side for Weatherization
TN-24590-06-03237	Removal of Parasitic Loads from the Fire Service Water System
TN-24590-06-03239	Actuated Jumper Valves - Specification and Procurement by C&I
TN-24590-06-03241 TN-24590-06-03243	Revisions to HLW Cranes and Cable Reels Non-Logic Driven Activities Re-Plan for Plant Design
TN-24590-06-03244	Addition of Fire Barrier Drawings to CSA Scope
TN-24590-06-03245	Safeguards and Security Budget Transfer
TN-24590-06-03247	Addition of Humidification to HLW C2 AHUs
TN-24590-06-03251	LBL Near Term Title III Engineering Hours
TN-24590-06-03253	PT Internal Replan of HVAC PMB
TN-24590-06-03254	Engineering Procedures and Processes Staff Increase
TN-24590-06-03260	Align Equipment, Budget & Schedule for MH MRs
TN-24590-06-03262	Additional Criticality Support
TN-24590-06-03264	Construction Subcontracts Planning Packages to Work Packages.
TN-24590-06-03265	LA-ICP-AES Installation Site Testing
TN-24590-06-03266	Remove Construction Escalation Activities
TN-24590-06-03268	LAW, Convert Eight Planning Package to Work Packages
TN-24590-06-03269	Correction of Time Phasing for PT Equipment BCWS previously incorrectly statused as Complete
TN-24590-06-03270	Reconciliation of Execution Revision Equipment Budget
TN-24590-06-03271	PTF Committed System To Go Unit Rate Alignment Provision of the PTF Proliminary ISM Schoolule to Policet Provised Design Schoolule
TN-24590-06-03272 TN-24590-06-03273	Revision of the PTF Preliminary ISM Schedule to Reflect Revised Design Schedule
TN-24590-06-03275	Early LAW 2014 Commissioning Conceptual Design Study and Report Storage Costs for Suspended Pressure Vessels
TN-24590-06-03278	Emergency Diesel Generator Alternatives Study
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Trend No.	Trend Description
TN-24590-06-03279	Revision To Startup Generic Logic In The Baseline Schedule
TN-24590-06-03280	Ultrafilter Tube Failure Investigation
TN-24590-06-03283	UFP Vessel Modifications Due to Capacity Mods
TN-24590-06-03284	OBS HB Plant Wide Favorable Variance
TN-24590-06-03285	Mentoring EPCON -Supplier Quality & Quality Assurance
TN-24590-06-03287	Transfer of Six Sigma from Proj Bus Mgmt to Quality and Performance Assurance
TN-24590-06-03289	Planning Package to Work Package Conversion for C&I Plant Equip
TN-24590-06-03292	Implement Pipe Spt ABAR in Criteria, Guides, & Std Calcs - Phase II
TN-24590-06-03294	LAW Elevator Guide Rail
TN-24590-06-03295	LAW - Elevation +48 Adsorber 1A and 1B
TN-24590-06-03296	Modification to Sodium Hydroxide Reagent Piping & Controls
TN-24590-06-03297 TN-24590-06-03299	Shield Door Recovery Device Receiver Add to Crane Maint Shield Door Scope M&PE Engineering EQ Implementation
TN-24590-06-03299	LAW Pour Cave Cooling Panel Emissivity Requirements
TN-24590-06-03304	Favorable Trend for PTF Crane Maintenance Shield Door
TN-24590-06-03306	BOF Internal Replan
TN-24590-06-03307	HLW Delete BCP Budget Place Holder Activities
TN-24590-06-03308	Realignment of HLW Steel Budget and Quantities per Hirschfeld Steel Contract
TN-24590-06-03309	LAW Combined Trend
TN-24590-06-03310	Place PT PVV Fans on Emergency Diesel Generator Power
TN-24590-06-03312	HLW Electrical Joggle Purchase Strategy Change
TN-24590-06-03313	LAW Pour Cave Panel and Hanger Installation; LFH Shard Samplers; Vessels 2 & 4; & Pipe Interference w/Lug
TN-24590-06-03314	LAW - Finish Line Hoists Monorail Lidding/ Dual Rail Hoists/ JIB Cranes
TN-24590-06-03315	Transportation and Refurbishment of ACECO cranes
TN-24590-06-03316	LAW Piping Planning Package to Work Package
TN-24590-06-03318	Impact of Preparation Guide for US DOE Nonreactor Nuclear Facility Safety Analyses
TN-24590-06-03319	Assess Impact to Preparation for Cost & Schedule Estimate for Installing Third Melter
TN-24590-06-03320	C&T Laboratory Labor Underrun
TN-24590-06-03321	Emergency Diesel Generator Evaluation - Schedule Logic Changes
TN-24590-06-03322	REA for Oregon Iron Works (24590-QL-POA-ADDH-00007)
TN-24590-06-03323	PP Replan for M-6 Process Limits Definition
TN-24590-06-03324 TN-24590-06-03325	PP Replan for Alt Resin Stage III Testing Construction Distribs Budget Increase (April '07 - Sept '07) due to Direct Craft Labor BCPs
TN-24590-06-03326	LAW Melter Lid Modifications
TN-24590-06-03327	LAB Planning Package to Work Package
TN-24590-06-03328	LAW Planning Package to Work Package Conversion
TN-24590-06-03330	Delete R&T Testing of Antifoam Impact on Filter Flux
TN-24590-06-03332	Analysis of Concrete Temperature Around Hot Pipe Penetrations
TN-24590-06-03333	HLW Melter Seismic Calculation
TN-24590-06-03335	LAB Construction Mechanical Equip Schedule Correction
TN-24590-06-03336	HLW Carbon Bed Adsorbers (CBA) Fabrication & Delivery Delay
TN-24590-06-03341	BOF/LAB Rod Room Attendant
TN-24590-06-03344	LAW - Install steel supports for LSH-CRN-00011 and LSH-CRN-00012 bus bars
TN-24590-06-03347	HLW Construction PP to WP
TN-24590-06-03350 TN-24590-06-03351	HLW Radar Level Test Foaming Issues when Agitation is Stopped Subcontracts Converting PP to WP
TN-24590-06-03354	Jumper - Frame Vendor Proof of Performance Program
TN-24590-06-03356	ITS Valves for LAW Water Shutoff
TN-24590-06-03357	TLP Reboiler Modification
TN-24590-06-03358	Updated Quantities and Unit Rates for HLW MS Post-Committed Work
TN-24590-06-03359	Correction of Overstated PT Jumper Budget
TN-24590-06-03360	Transfer Safety Assurance Scope and Budget from PBM to Quality Assurance
TN-24590-06-03362	Flowdown of Non-Destructive Examination Requirements to Piping
TN-24590-06-03363	PE&T Functional Manager
TN-24590-06-03364	Electrical Bulk Material Quantity & Pricing Update for LAW
TN-24590-06-03366	LAW 2014 Cost & Schedule Evaluation
TN-24590-06-03367	BOF - Pipe Rack 5C/5B, PT/HLW Interference
TN-24590-06-03368	Schedule Logic Correction for EPPR activity 01-J1123-002 PJM Design Activities Property Management Budget Transfer from Aggregation Services (MR 1 08 PO) to Material Mant
TN-24590-06-03370 TN-24590-06-03371	Property Management Budget Transfer from Acquisition Services (WP 1.08-B0) to Material Mgmt BOF Steam Plant PP to WP
TN-24590-06-03374	Engineering Training Forecast FY08/09
TN-24590-06-03375	Adjust BCWS for Pipe Spools due to Engineering Holds on Pipe Spool Releases
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Trend No.	Trend Description
TN-24590-06-03377	PTF Plant Design Utility Rack EPPR Code Ties
TN-24590-06-03378	PTF Plant Design RGM EPPR Code Ties & Schedule Realignment
TN-24590-06-03379	Budget for a Full Time Electrical Authority Having Jurisdiction (AHJ) Position
TN-24590-06-03381	Allyl Alcohol Method Regulatory Requirements
TN-24590-06-03383	Forward Pricing Rates (FPR) (Mar-2008)
TN-24590-06-03385	Planning Element Clean-up
TN-24590-06-03386	Correction of overstated bud, for PO 24590-QL-POA-MJKG-00004
TN-24590-06-03387	Propane Line Failure Testing/ DFO Coating Repairs
TN-24590-06-03390	BOF NLD/DFO Electrical Underwriters Laboratories Inspections/Modifications.
TN-24590-06-03392 TN-24590-06-03395	Positive Cost Variance in Plant Wide Design ODC's Correction of Overstated Budget CM-MRA-MEEM-00001
TN-24590-06-03396	Correction of Overstated Budget QL-POB-MVA0-00010
TN-24590-06-03397	Implementation of Topography Reviews
TN-24590-06-03398	LAW PP to WP
TN-24590-06-03399	LAB Construction Electrical Equipment Schedule Activity Definitization
TN-24590-06-03400	PJM Overblow Testing (Favorable)
TN-24590-06-03401	Review of the CGD Program
TN-24590-06-03407	EFRT M3 - IRP Revision and Additional Test Planning Scope
TN-24590-06-03408	Positive Cost Variance in E&NS Regulatory Safety Management Account
TN-24590-06-03410	Assess the Impact of Adding DOE/RW-0333P, QARD Rev 20
TN-24590-06-03411	Vendor REA for Revised Melter Material Quantities
TN-24590-06-03412	ASX Sampler Tests Replan
TN-24590-06-03413	Distribs Scaffolding PP to WP
TN-24590-06-03414	PT & HLW Upgrade Temp. Power to Construction Power
TN-24590-06-03415	Temporary Construction Utilities - Propane System Additional Architectural Sections and Details for HLW and PTF
TN-24590-06-03416 TN-24590-06-03417	LAW - LFH Shard Samplers
TN-24590-06-03417	LAW Tools and Equipment for Removal of Silica Containing Coatings
TN-24590-06-03419	Implementation of ASME NQA-1 2000 and QARD 18 for Duratek, Inc.
TN-24590-06-03422	BOF 90 Day Window PP to WP
TN-24590-06-03425	C&T CY08 PP Replan
TN-24590-06-03426	BOF/LAB - Piping/Hanger Rework
TN-24590-06-03427	LAW - Melter Rail Grout
TN-24590-06-03428	PTF, PP to WP, Clarification of Electrical work.
TN-24590-06-03429	LAW Stair Nosing
TN-24590-06-03431	Pretreatment PP to WP Conversion
TN-24590-06-03432	Pretreatment Selected Wall & Slab Consolidation & PP to WP
TN-24590-06-03433	BOF ITS Switchgear Craft Labor Giveback
TN-24590-06-03435	ASX Design Completion, Trouble Shooting, and Fabrication Knowledge Relay LLC Support for Migration of P3-to-P6
TN-24590-06-03437 TN-24590-06-03439	Additional LAW Melter bubblers
TN-24590-06-03439	Material Services & Procurement Engineering Startup
TN-24590-06-03444	BOF WTB Pipe/Electrical/Civil Design Evolution/Rework
TN-24590-06-03446	BOF CCP Electrical Conduit Installation Supports Redesign/Rework
TN-24590-06-03447	PSI ENG Spec Change for Panel Indicator Lighting Colors and Supplier Document Submittal
TNL-24500-06 02450	Requirements Re-Bid of API-610 Seal-less pumps due to requirements changes
TN-24590-06-03450 TN-24590-06-03451	Correction of Time Phasing for HLW Equipment BCWS incorrectly statused as Complete
TN-24590-06-03451	PTF - Definitization of Drain Piping Work Packages
TN-24590-06-03455	LAW North Annex Inc Fireproof Quantity & Change Fireproof Material Type/Finish
TN-24590-06-03456	PW Vactor (VAC) Hydro Excavator Trucks
TN-24590-06-03457	PW - Installation of Repeater Antennas
TN-24590-06-03459	PW - T-52 Building - Add air intake dampers and seal louver/duct interfaces
TN-24590-06-03461	Elimination of the WBS 1.08 Plant Wide
TN-24590-06-03462	Conversion of PP to WP and Addition of 5 Enclosures for LAB
TN-24590-06-03463	Material Services & Procurement Engineering Team Implementation
TN-24590-06-03464	Subcontracts, Chicago Bridge & Iron Overhead Adjustment from 1.08 Account.
TN-24590-06-03465	Mentoring EPCON Supplier Quality
TN-24590-06-03467	Utility Service Schedule Updates
TN-24590-06-03468	BOF - T-52 Construction Warehouse Fire Detection System Upgrade
TN-24590-06-03470	Response to CRPTs: Pressure Safety Valves (PSV)
TN-24590-06-03471 TN-24590-06-03472	Ultrafilter Drain Testing (Favorable) CGD Impacts on Procurement of PTF Remote Clamp Connectors
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Trend No.	Trend Description
TN-24590-06-03473	Additional E&NS Resources for Fire Safety Support
TN-24590-06-03475	PW Preventative Maintenance Material for Permanent Plant Equipment FY08/FY09
TN-24590-06-03476	PTF Leak Detection Boxes
TN-24590-06-03480	LAB, Planning Package to Work Package
TN-24590-06-03482	MH Engineering Tasks To Support Other Disciplines And Management
TN-24590-06-03483	Modifications to PTF HVAC Design for Mitigation of Loss of Cooling & Loss of Heating Accidents
TN-24590-06-03484	Vessel Code Evaluation Subcontract
TN-24590-06-03485	M&PE Equipment Group Engineering Budget
TN-24590-06-03486	Transfer PP CSA Hrs for Design of Jumper Steel Grouted Pads/Embeds to WPs in PTF Hot Cell
TN-24590-06-03489	HVAC Alternate Fire Barrier Analysis
TN-24590-06-03490	Transfer of Vessel Analysis Scope to WTP Engineering M12 PDL-W Modification Overrun
TN-24590-06-03492 TN-24590-06-03494	ENS Training Forecast FY08 through FY16
TN-24590-06-03494	HLW - Unit Rate revision for pipe and electrical sleeves
TN-24590-06-03496	PT - Removal & Reinstallation of Embedded Conduit, +56' el
TN-24590-06-03497	NOx Gas, Rearrangement of instruments due to potential exposure to NOx gas
TN-24590-06-03499	PT PP to WP Conversion and Internal Replanning thru FY09
TN-24590-06-03500	C&I and Electrical Equipment List for Facilities
TN-24590-06-03501	Engineer, Procure & Install Guardrails on Pre-Engineered Metal Buildings (ENG 1069)
TN-24590-06-03502	EFRT Issue M3 Completion
TN-24590-06-03505	LAW, Planning Package to Work Package, Replan
TN-24590-06-03506	LAW, Planning Package to Work Package, Replan
TN-24590-06-03508	HLW Drum Transfer Rails
TN-24590-06-03509	BOF FSW Battery Rack Modifications
TN-24590-06-03512	Compensation For QL-POA-MEEM-00001 REA Vendor Cost
TN-24590-06-03514	LAW - Melter Winch, Pulley Systems
TN-24590-06-03516	HLW - Completed Scope Summary (Favorable)
TN-24590-06-03517	HLW, PP to WP, FY08 & FY10
TN-24590-06-03518 TN-24590-06-03520	PTF Building 12 Re-Design HLW - P3 to COBRA Alignment
TN-24590-06-03520	LAW - COBRA to P3 Alignment (Favorable)
TN-24590-06-03524	Convert Planning Package to Work Package for 24590-CM-MRE-MVA0-00003
TN-24590-06-03528	ISM Changes for HOP Preheaters
TN-24590-06-03529	Material Corrosion Evaluation
TN-24590-06-03531	Downtrend for Late Adjustments related to EFRT & Misc Ops in 1.08MT Plant Material
TN-24590-06-03535	Steam Conditioning Skid Scope Reduction
TN-24590-06-03539	Support for Revisions to Unique, One-of-a-Kind MH Equip
TN-24590-06-03540	Seismic Monitoring System
TN-24590-06-03544	SRNL Project Management Extension
TN-24590-06-03545	LAW PP to WP Conversion, Bulges and Pumps
TN-24590-06-03548	Implement ILAW/IHLW Glass Formulation Algorithms in Plant Control and Waste Form Compliance Software
TN-24590-06-03553	BOF-FSW, Pump House Foundation to Increase scope for DH craft
TN-24590-06-03556	False Claims Act Suit (Rille Litigation)
TN-24590-06-03557	Construction Support for Black Cell Piping Pilot Program
TN-24590-06-03558	Implementation and Execution of Revised Architectural AHJ Process
TN-24590-06-03560	Upgrade Lenel Security Software
TN-24590-06-03561	ACECO Crane Refurbishment
TN-24590-06-03565 TN-24590-06-03568	Remote Fastener Qualification for FEP & TLP Systems LAB Jib Crane support; Hot Cell Maint. Room
TN-24590-06-03569	Engineering Support for Construction Subcontracts and Schedule Alignment
TN-24590-06-03570	LAW - Add HVAC Fire Dampers on Fire Rated Walls
TN-24590-06-03573	Omitted Equip. Mounting Interfaces - Transition Frames/Equip. Pads
TN-24590-06-03577	PTF Additional activates to complete 4th Lift Walls
TN-24590-06-03578	Pipe Deemed Deleted Reusable Material (DRM) for All Facilities
TN-24590-06-03579	Piping Joggles/Process Improvements
TN-24590-06-03580	BOF Additional Fire Alarm Panels FSW
TN-24590-06-03583	M12 - Pretreatment Engineering Platform Transportation Costs
TN-24590-06-03584	Vendor Rebid for RLD-VSL-00002 Fabrication
TN-24590-06-03585	Favorable Trend for P5 (IX Process Development)
TN-24590-06-03586	Fire Protection Resident Engineer
TN-24590-06-03587	PTF & HLW Bogie Shield Doors Seismic Analysis Qualification
TN-24590-06-03588	Material Handling Facility Furniture/Fiber Installation

Trend No.	Trend Description
TN-24590-06-03591	HLW Formwork Shoring 0' through 37'
TN-24590-06-03593	LAW - Compound Tolerances Civil/Structural/Mechanical
TN-24590-06-03594	BOF - Vac Truck Trend
TN-24590-06-03595	LAW - Penthouse Siding Support Steel
TN-24590-06-03596	LAB PP to WP and Internal Replan
TN-24590-06-03598	Plant Design Unit Rates for Modeling and Isometric Unit Rates
TN-24590-06-03600	DOE O 430.2B Transportation/Fleet Maintenance (Assessment)
TN-24590-06-03601	Thermal Catalytic Oxidizer Procurement Strategy Update
TN-24590-06-03603 TN-24590-06-03604	HLW Task Order Restart Additional scope for resolution of 24590-WTP-CRPT-QA-07-170
TN-24590-06-03606	HLW N690 Weld Inspections
TN-24590-06-03607	PW Electrical Q Stainless Steel Fasteners to Replace CM Stainless Steel Fasteners
TN-24590-06-03614	Changes to PT and HLW Steam Systems Quality and Seismic Categories
TN-24590-06-03615	LAB - Stack Steel Restraint Lugs
TN-24590-06-03617	PW Implementation Of 10CFR851 Budget into Correct Control Accounts
TN-24590-06-03619	Deletion of PJV Bulge and Vessel
TN-24590-06-03620	HLW Establishing a Unit Rate for HLW Joggle Installation
TN-24590-06-03621	Transfer Remaining Budget for Load Path from PWM to CS&A
TN-24590-06-03622	Engr Recovery Plan 2008 Office Moves
TN-24590-06-03624	LAW - Concrete planning package to work package replan
TN-24590-06-03627	LAW - LMH-RAIL-00001,2,3,4
TN-24590-06-03628	Development of Alternatives for Permanent Melter Assembly Building
TN-24590-06-03629	Correction of Coding Errors on PO CM-POA-MAH0-00001 and QL-POA-MACS-00002
TN-24590-06-03631	PTF Installation of Cell Top Steel & Platforms PP to WP Conversion PTF Rod Room Attendant
TN-24590-06-03632	Startup/Commissioning Milestone & Logic Cleanup
TN-24590-06-03634 TN-24590-06-03636	LAW Melter End Trucks Petersen REA
TN-24590-06-03637	LAW Inert Fill Pipe and Support Structure
TN-24590-06-03638	Establishment of Management Budget for New Plant Equipment Group
TN-24590-06-03639	Deletion of Two (2) Redundant P3 LAW Piping Activities
TN-24590-06-03641	ACGIH Physical Agent TLV Implementation
TN-24590-06-03642	HLW Field Modification of Fabricated Steel to Accommodate Installation of Multi Discipline Rack Steel
TN-24590-06-03643	Installation of Pipe for Vessel 904
TN-24590-06-03644	LAW - SHIM PLATES FOR BULGES ON +28 ELEVATION
TN-24590-06-03646	Independent Verification of Melter Calculations (CRPT-QA-07-325)
TN-24590-06-03647	EFRT M-1 Test Acception PNNL Descope
TN-24590-06-03649	LAW - Combined Electrical Trend
TN-24590-06-03650	Knowledge Relay P3-P6 Stage 4
TN-24590-06-03654 TN-24590-06-03655	Transfer Constr FNM Project S/C Mgmt Scope/Budget from Const to Acq Srvs CHW Circuit Balancing Valves for LAW and PT
TN-24590-06-03657	Baseline T560 Migration to P6
TN-24590-06-03658	HLW SBS and HEME Modifications
TN-24590-06-03659	Cathodic Electrical Equipment Estimate Error
TN-24590-06-03661	Construction Distributable Shuttle Van for Site to Town Transportation
TN-24590-06-03662	Transfer of Craft Training Hours from PT/HLW Remobilization to Construction Distributables
TN-24590-06-03663	BOF Preventative Maintenance
TN-24590-06-03664	PW Additional M&TE Budget for Construction Distributables
TN-24590-06-03670	Increase in BOF Grounding Cable Quantities
TN-24590-06-03672	Emergency Diesel Generator Design
TN-24590-06-03673	PT & LAW - Steel Price Increase for American Fabricator Pressure Vessels
TN-24590-06-03676	PTF/HLW - Add HVAC Fire Dampers on Fire Rated Walls
TN-24590-06-03678	Re-align Planning Package BCWS With The Baseline Schedule
TN-24590-06-03681 TN-24590-06-03682	LAW Carbon Bed Adsorber EQ & ISM Driven Changes PW Replacement of Flooring in Site Restrooms
TN-24590-06-03682	PTF - Design Changes to Completed Work for Walls 4-30 & 4-31
TN-24590-06-03684	LAB Stack Grating Rework
TN-24590-06-03686	System LFH Decontamination Robotic Arm Modifications
TN-24590-06-03689	LAW-R&T PP to WP Commissioning Simulant
TN-24590-06-03690	R&T Duratek (ES) Closeout
TN-24590-06-03691	LAW - Painting & Wall Covering Scope Transfer Between Control Accounts
TN-24590-06-03692	HLW - Correcting Omission in MAY 06 EAC of 4 sets of -21' Rails
TN-24590-06-03693	PTF: PIH-CRN-00004 Crane Rail Install/Align
TN-24590-06-03695	PW - PTF Temporary Work Platforms - Labor

Trend No.	Trend Description
TN-24590-06-03696	BOF PSA in DOE Line Rework Excavation/Backfill
TN-24590-06-03697	PTF 10-MHAN-00004 Decontamination Booth Assembly
TN-24590-06-03700	PNNL LAW Statistical Support PP to WP Conversion
TN-24590-06-03703	Corrosion Testing for UFP Vessels
TN-24590-06-03704	Craft Support for First Drop of Material at Construction Site
TN-24590-06-03709	Add Paint Booth and Abrasive Blast Booth in Building T-47
TN-24590-06-03710	Additional Maintenance Platforms for Crane LEH-CRN-00003
TN-24590-06-03714	BOF Electrical/Instrumentation Redesign
TN-24590-06-03715	Change of Procurement Strategy of LAW TCO Components
TN-24590-06-03716	Impact of assessment: DOE M 470.4-4, Information Security, Change 1
TN-24590-06-03717	PTF Concrete Chipping to Support Installation of Secondary Containments
TN-24590-06-03718	PTF Installation of RWH-DOOR-000007 and DOOR-00023 BOF CCP/NLD 2
TN-24590-06-03722	LAW - Additional Hours for Installation of Large Vessel Pumps
TN-24590-06-03725 TN-24590-06-03726	Combo Shop Modifications to Support Black Cell Pipe Repairs
TN-24590-06-03727	BOF DOE Pipe Work Pause/Cold Weather Work
TN-24590-06-03728	LAW Hoist Upgrades Concurrent to Refurbishment
TN-24590-06-03729	Acquisition Services Negotiated Savings - PIP No. P012
TN-24590-06-03732	CM HVAC S/C Schedule Impacts of Project Re-Sequence Plan & Execution Strategy
TN-24590-06-03733	LAB Stack Stair Handrail Modification
TN-24590-06-03735	M3 Phase I Cohesive Simulant Descope
TN-24590-06-03738	Tepid Water Heaters for BOF, LAW, LAB, and HLW
TN-24590-06-03739	HFH Crane Modifications, Spares, and Recovery System
TN-24590-06-03742	Convert LAW Engineering Subcontract PP to WP
TN-24590-06-03743	LAW - Shard Table Support; Embed Interference; Painting of Black Iron
TN-24590-06-03750	HLW Melter Seismic Analysis Scope Increase
TN-24590-06-03751	FEA Calculation for 6 LAW and 2 PTF Bulges
TN-24590-06-03755	Equipment Anti-Sweat and Personnel Protection Insulation
TN-24590-06-03757	LAB - Cable Tray Supports
TN-24590-06-03762	Construction Distribs Budget Increase in Support of Approved BCP's from Oct 07 – Aug 08
TN-24590-06-03765	Additional Budge for HOP Manual Valves
TN-24590-06-03766	T43 & 47, Area 41 & Parking Lot Fencing
TN-24590-06-03768 TN-24590-06-03769	Engineering Support of DOE Audit Team BOF - Disassembly / Reassembly of the CCP Motor Starter Cabinets
111-24390-06-03769	LAW - Primavera BCWS and BCWP Electrical Commodity Alignment to TEAMWorks, Setroute, and
TN-24590-06-03771	QURR
TN-24590-06-03774	LAW Additional Hrs for Installation of LFM-PMP 00007, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18
TN-24590-06-03775	Melter Feed Studies - Agitator Design Change
TN-24590-06-03776	BOF - Switchgear Drip Shield Install (Bldg. 87 & 91)
TN-24590-06-03780	Schedule Change to Planning Package for Jumper Materials
TN-24590-06-03782 TN-24590-06-03783	Anhydrous Ammonia Storage Facility LAW Electrical Unit Rate Forecast
TN-24590-06-03785	LAW Electrical Offic Rate Forecast LAW - MECHANICAL REWORK FORECAST
TN-24590-06-03786	PT - IX / Alt Resin III PP Partial Return to MR
TN-24590-06-03788	Reallocate HVAC Procurement from Existing Purchase Order (PO) to new PO
TN-24590-06-03793	PE&FM System Leads Tasks
TN-24590-06-03794	LAB Pipe Unit Rates
TN-24590-06-03800	PTF Girt Clip Modifications
TN-24590-06-03801	PTF Chipping Concrete Top of Existing Wall
TN-24590-06-03804	Recovery Plan Optimization - Electrical (Concession)
TN-24590-06-03805	Recovery Plan Optimization - Mechanical Systems (Concession)
TN-24590-06-03806	Recovery Plan Optimization - C&I Estimate Reductions (Concession)
TN-24590-06-03807	Recovery Plan Optimization - Plant Design (Concession)
TN-24590-06-03808	Recovery Plan Optimization - Civil/Structural/Architectural (Concession)
TN-24590-06-03809	Recovery Plan Optimization - Mechanical Handling (Concession)
TN-24590-06-03810	Recovery Plan Optimization - Engineering Management (Concession)
TN-24590-06-03811	Recovery Plan Optimization - PEQ (Concession)
TN-24590-06-03851	Changes to PT and HLW Steam Systems Quality and Seismic Categories
TN-24590-06-03756	Change to PT Rack Procurement Strategy and Risk Realization PW Replacement of Spiral Wound and Flat Sheet Graphite Gaskets
TN-24590-06-03798 TN-24590-06-03815	HLW - Safety Wire Mesh for Elevated Slabs
TN-24590-06-03816	HLW Extra Concrete Floor Finishing for Liner Plates
TN-24590-06-03817	HLW Establishing an Embeds & Steel Field Fabrication Account
114 27000 00-00017	THE POLICE HIND COST OF CONTINUE TO ADDITIONAL TO ADDITION

Trend No.	Trend Description	
TN-24590-06-03818	HLW - Piping/Hanger Rework	

SECTION J – LIST OF ATTACHMENTS ATTACHMENT J ADVANCE UNDERSTANDING ON COSTS (143)

Subattachment B

List of Exclusions from Equitable Adjustment Settlement Established in Modification No. 143

Trend No.	Trend Description	Definitized
TN-24590-06-02279	Expansion of DWP Requirements (Permit Modifications)	193
TN-24590-06-02381	DOE Order 205-1A Cyber Security Management Program	
TN-24590-06-02728	M-12 Engineering Scale Pretreatment System (Design, Procure, Install)	214
TN-24590-06-02778	Reduction of Core Bores for HPAV Active Controls	
	Deleted (158)	
TN-24590-06-03109	Plant Material Bulk Steel EAC Increase	
TN-24590-06-03123	EPD Funding to Support EFRT M12 PT Engineering Platform Completion	214
TN-24590-06-03146	EPD Funding to Support EFRT M12 PT Engineering Platform	214
TN-24590-06-03204	EPD Funding to Support EFRT M12 PTF Engineering Platform Completion, Part 3	214
TN-24590-06-03242	PEP Install, Plan Site Integrated and Shakedown Testing, & Oversight	214
TN-24590-06-03282	Additional HPAV Active Controls	
TN-24590-06-03317	BNI and DOE HPAV Test Program	
	Deleted (158)	
TN-24590-06-03394	ABAR to Implement DOE S 1066 Chpt 14 for Nuclear Filter Plenum Fire Protection	
TN-24590-06-03405	PEP Site Integrated Testing and Shakedown	214
	Deleted (164)	
TN-24590-06-03503	PEP Phase 1 Testing, Trend 1	214
TN-24590-06-03527	Engineering Study and Support Scope for Standard 1066	
TN-24590-06-03533	Quantity and Material Escalation for Pipe Supports Impacting Control Account 1.08 MT	
TN-24590-06-03537	Increase Fuel Surcharge	
	Deleted (158)	
TN-24590-06-03708	Implementation of Features Equivalent to DOE-STD-1066	
TN-24590-06-03752	Safety Classification Process for the Waste Treatment and Immobilization Plant	
	Deleted (164)	
TN-24590-06-03754	Increased Cost for HPAV Test Program	
TN-24590-06-03781	Evaluation and Interim Report on Updated Radioactive Source Term	
TN-24590-06-03820	Re-Evaluation Of HPAV Design Strain Criteria	
TN-24590-06-03823	Pretreatment Engineering Platform Shakedown Testing Extension	214
TN-24590-06-03827	Additional Support for Material at Risk Design Basis	
TN-24590-06-03859	Additional Impacts Associated with 10 CFR 851	233 & 238
	Additional Impacts Associated with 10 CFR 851 – Silica Sand Impact, REA 2010-012	233
	(Note: This is a portion of TN-24590-06-03859)	
	Additional Impacts Associated with 10 CFR 851 – Subcontract Implementation Costs,	238
	REA 2010-003 (Note: This is a portion of TN-24590-06-03859)	
TN-24590-06-03860	Additional Escalation Impacts Beyond May 2006 EAC Rates Through Jan 2009	
	Escalation of Craft Labor (FY2006-FY2009); TN-24590-06-04947; REA 2010-004	187
	(NOTE: This is a portion of TN-24590-06-03860)	
TN-24590-06-03861	Received Vendor & Subcontractor Claims Due to DOE Impacts	

Trend No.	Trend Description	
	Vendor & Subcontractor Claims Due to DOE Impacts – Oregon Iron Works, TN-24590-06-04020 (Note: This is a portion of TN-24590-06-03861.)	
	Vendor & Subcontract Claims Due to DOE Impacts – FD Thomas, Inc. REA will not submitted. (Note this is a portion of TN-24590-06-03861)	230
	Vendor & Subcontract Claims Due to DOE Impacts – Cobra Roofing Services, Inc. REA will not submitted. (Note this is a portion of TN-24590-06-03861)	230
	Vendor & Subcontract Claims Due to DOE Impacts -Diversified Metal Products (Note this is a portion of TN-24590-06-03861)	290
	Vendor & Subcontract Claims Due to DOE Impacts – Quality Inspection Services International, Inc. (QISI) REA will not submitted. (Note this is a portion of TN-24590-06-03861)	230
	Vendor & Subcontract Claims Due to DOE Impacts – Central Pre-Mix Concrete Company, Inc. REA 2010-020 will not submitted. (Note this is a portion of TN-24590-06-03861)	230
	Vendor & Subcontract Claims Due to DOE Impacts – Apollo Sheet Metal, Inc. REA 2010-019 will not submitted. (Note this is a portion of TN-24590-06-03861)	230
	Vendor & Subcontract Claims Due to DOE Impacts – Ellis & Watts, Inc. REA 2010-018 will not submitted. (Note this is a portion of TN-24590-06-03861)	230

Modification No.	Modification Description	Definitized
M090	Implement DOE O 205.1A, Department of Energy Cyber Security Management	217
M101	Maximum Available Control Technology and Destructive & Removal Efficiency Testing	
M122	Process Changes for Revised Dangerous Waste Permit	193
M136 Item 3c	Deleted (164)	
M141 Item c	Implement New Safety Classification Process	

SECTION J – LIST OF ATTACHMENTS ATTACHMENT J ADVANCE UNDERSTANDING ON COSTS (384)

Sub-Attachment C

List of Exclusions from Release and Waiver of Claims (Modification No. 384)

- 1. The revised cost, scope, schedule, and all terms and conditions as set forth in this modification are intended to reflect a complete and final resolution of all events, issues, actions and/or inactions of either party that gave rise to the increase in cost and extension of the schedule for the work herein identified as CLINs 1 and 2. For purposes of the waiver and release of claims for Contract Modification 384, the waiver of issues which "were known or should have been known" does not include pending issues for which an authorized representative of the government has not provided a final determination or formal direction or interpretation of the contract. The intent of this exclusion is to avoid foreclosure of the contractor's right to assert a basis for relief or otherwise dispute actions of the Government as pertains to matters presently being contemplated, but not formally acted upon, by the Government. It is not the intent of this exclusion to provide entitlement to relief, or otherwise entitle the contractor to bring any action that results in a change to the cost, scope, schedule, or any other term or condition of the contract for events occurring prior to the date of this modification.
- Commercial Grade Dedication (CGD). The settlement for Modification (384) includes implementation of changes in the form of CGD documentation as described in BNI Corrective Action Plan (CAP) Actions 4-9 and actions to implement the new documentation expectations on all LBL and DFLAW equipment, instruments and bulk materials that have not yet been received and installed, including any vendor impacts due to delays and changes in requirements.

The included BNI CAP Actions 4–9 are set forth in Sub-Attachment C, Table 1 (Included CAP Actions 4-9) (6 pages)

Cost and schedule impacts associated with CGD requirements or expectations extending beyond CAP Actions 4–9 are excluded. Specifically excluded are cost and schedule impacts arising from:

- the 19 "parking lot items"; are set forth in Sub-Attachment C, Table 2 (19 CGD Parking Lot Items) (3 pages)
- any revision to the final root cause analysis (24590-WTP-RCA-MGT-15-0338, Rev. 2);
- benchmark plans; (Definition- Benchmark CGD plans" to be developed jointly by BNI and ORP (as an outcome of the CGD Working Group chartered in October 2015) as general examples for future CGD plans, to demonstrate implementation of current CGD requirements in addition to ORP directed changes relative to the 19 parking lot items.)
- the CGD extent of condition review and any related impacts to received or installed equipment, instruments, and materials.

(Record Note: DOE included a deliverable to implement the CGD extent of condition review and impacts in Section C, *Statement of Work, Table C.5-1.1. Deliverables*, 7.11) (397)

- 3. <u>DOE-STD-3009</u>. Implementation of DOE-STD-3009-2014 is excluded from the settlement of Modification No. 384.
- 4. <u>LAW Confinement Ventilation System ("C5V")</u>. Primary confinement for a melter off-gas release event is provided by the safety-significant melter off-gas system. Secondary confinement of the off-gas is provided by the C5V system, which has been designed, designated and constructed as

defense in depth. The settlement for Modification (384) specifically excludes potential cost and schedule impacts for C5V design changes, hardware changes, testing, analysis or other scope or schedule impacts resulting from changing the designation of the LAW C5V secondary confinement system from defense in depth to safety significant pursuant to the approach described in Section C, Standard 3, paragraph (c), item (25).

- DOE Order 414.1D: The settlement for Modification (384) includes development of a plan for implementation of DOE Order 414.1D. Specifically excluded is implementation of DOE Order 414.1D.
- 6. <u>Standard 1195</u>: The settlement for Modification (384) includes tailored implementation of International Electrotechnical Commission (IEC) standard 61511-1 concurrent with DOE-STD-1195-2011 as a means of achieving Safety Integrity Level 2 (SIL-2) for low demand simple Safety Instrumented Functions (SIFs) as described in Section J (DOE order list). Specifically excluded are potential cost and schedule impacts associated with achieving SIL-2 through redundancy.
- 7. <u>Installed Underground Pipe</u>: The settlement for Modification (384) includes costs for repair of existing damaged or defective installed LBL or DFLAW underground piping identified during the contract performance period, and development of an Underground Pipe Integrity Program, which includes an evaluation of existing underground inspection technologies, an inspection plan and risk ranking of inspection locations. Specifically excluded is implementation of the Underground Pipe Integrity Program, including any condition assessment or verification of existing piping, or any maintenance, repairs or replacement of installed underground piping, except to the extent that the piping is defective or damaged by BNI.
- Design & Operability Impacts: Cost and schedule impacts associated with LAW design basis issues in Category 4 (issues requiring contract change) and category 5 (issues requiring further review for validity) cited in the Low-Activity Waste Facility Design and Operability Review Report dated September 4, 2015 (and detailed in CCN 276214) are excluded from the settlement of Modification (384).
- 9. DOE Letter of Technical Direction: Excluded from the settlement of Modification (384) are potential cost and delay impacts associated with design changes, hardware changes, testing, analysis or other scope or schedule impacts resulting as a result of the nuclear safety direction in the DOE-ORP letter of technical direction CCN 281177, including but not limited to changes related to systems including ammonia, CO2 decon, and fire barriers, or accident scenarios including caustic spray leaks or NOx; but not including the C5V system.

documents.

SECTION J – LIST OF ATTACHMENTS ATTACHMENT J ADVANCE UNDERSTANDING ON COSTS (384)

Subattachment C, Table 1

Corrective actions to correct the condition and cause to prevent further findings.

Table 1 (Included CAP Actions 4-9) (384)

BNI Action 24590-WTP-GCA-MGT-15-00338-A	Evidence of Completion
Immediate/Compensatory Acti	Evidence of Completion
4. Establish a "Q Equipment Review Board" to Review Complex CGD Equipment Procurements: Establish a "Q Equipment Review Board" to Review Complex CGD Equipment Procurements	The following objective evidence can be attached (electronically) to CA-4 in CAMP and / or identified by document number(s) identifiable and retrievable in InfoWorks:
Establish a WTP "Q Equipment Review Board (QERB)" responsible for providing a review of process interfaces/handoffs for complex CGD equipment procurements. Reviews will be conducted to determine if requisite nuclear safety, design, equipment qualification (EQ), commercial grade dedication (CGD), and quality requirements have been correctly implemented through the various process interfaces, are being flowed down and effectively implemented in the procurement process, resulting in reasonable assurance the safety function will be met. Develop briefing/presentation material to discuss the conditions observed in the DOE Audit Report and the RCA with the QERB board members. Include lessons learned progressively as QERB's reviews are completed. Include this in a pre-job brief (effective implementation of this portion 6/15/2016). Document in QERB charter the required skill mix for the QERB board membership. Document actions (e.g., meeting minutes, action tracking matrix) resulting from QERB meetings and identify any resulting issues in Supplier Corrective Action Reports (SCAR), NCRs, and/or CRs, Action Tracking System items (ATS) as appropriate. Implementation of QERB action to be effective as of 10/05/2015. This immediate/compensatory action remains in effect through implementation of CAs 11 – 16 of this CR Retention as a corrective action to prevent recurrence (CAPR) will be evaluated when CAs 10-15 have been implemented.	 Approved WTP "Q Equipment Review Board (QERB)" charter. Documented actions resulting from QERB meetings (e.g., meeting minutes, action tracking matrix). Initiated, in-process, or completed SCARs, NCRs, and / or CRs/ATSs resulting from QERB reviews.
5. Develop and Issue a VCGD Submittal Review Guide Develop and issue a WTP Guide that includes a review checklist for WTP Procurement Engineering (PROE) review of CGD related G321-E document category 33.0-33.7 required submittal documents.	The following objective evidence can be attached (electronically) to CA-5 in CAMP and / or identified by document number(s) identifiable and retrievable in InfoWorks:

Table 1 (Included CAP Actions 4-9) (384)

BNI Action

24590-WTP-GCA-MGT-15-00338-A

Develop presentation materials for the new guide and conduct a briefing with WTP Procurement Engineering personnel. Identify members of the target audience required to receive the briefing and document attendance on signed attendance sheets.

Implementation of this action to be effective as of 10/05/2015.

Note: This immediate/compensatory / corrective action to prevent recurrence (CAPR) was created to address, in part, the following root causes resulting from 24590-WTP-RCA-MGT-15-0338:

- RC-1 Procurement Engineering did not effectively manage some aspects of process execution
 - This action will address personnel turnover and experience by providing guidance and checklists to drive consistency
- RC-3 Complex process flow coupled with lack of seamless integration of knowledge between functions and unclear R2A2s.

Evidence of Completion

- Approved VCGD Submittal Review Guide.
- Update PROE Learning Management System (LMS) profiles with a "Read and Review" (RR) for guide 24590-WTP-GPG-PROE-0006.
- Presentation materials developed to conduct briefing(s) on the new guide.
- Signed attendance sheets for target audience required to receive the briefing, including any make-up sessions.

6. Implement Checking of Bechtel-Generated CGD Plans:

Revise 24590-WTP-3DP-G06T-00904, *Evaluation of Commercial Grade Items and Services*, to establish a formal process for checking CGD plans prior to approval and issuance. Develop a CGD Plan "checking" checklist based on the implementing procedure and associated CGD Plan Form. The "checking" checklist should facilitate a consistent approach for checking that will result in comprehensive CGD Plans that can be understood and implemented by equally qualified personnel without recourse to the originator. "Checking" checklist elements should include, but not be limited to, review of:

- Design criteria applicable to the Q function(s)
- Critical characteristics associated with Q function(s) and basis for selection of each
- Acceptance methods
- Acceptance criteria with reference to applicable codes, standards, and design documents
- Sampling plans and basis for selection of each

Develop presentation materials for the revised procedure (and new checklist) and conduct a briefing with WTP Procurement Engineering personnel. Identify members of the target audience required to receive the briefing and document attendance on signed attendance sheets.

Implementation of this action to be effective as of 10/05/2015.

The following objective evidence can be attached (electronically) to CA-6 in CAMP and / or identified by document number(s) identifiable and retrievable in InfoWorks:

- Approved revision to 24590-WTP-3DP-G06T-00904, Evaluation of Commercial Grade Items and Services, that includes a new checklist for checking of CGD Plans prior to approval and issuance.
- Presentation materials developed to conduct briefing(s) on the revised procedure and new checklist.
- Signed attendance sheets for target audience required to receive the briefing, including any make-up sessions.
- Documentation of completed Read and Review (RR) of 24590-WTP-3DP-G06T-00904, Evaluation of Commercial Grade Items and Services for PROE.

Table 1 (Included CAP Actions 4-9) (384)

BNI Action	
24590-WTP-GCA-MGT-15-00338-A	Evidence of Completion
Note: This immediate/compensatory/corrective action to prevent recurrence (CAPR) was created to address, in part, the following root causes resulting from 24590-WTP-RCA-MGT-15-0338:	
RC-1 - Procurement Engineering did not effectively manage some aspects of process execution	
RC-2 - CGD process is handled differently than engineering processes.	
 7. Establish Mentoring: Conduct mentoring sessions with Procurement Engineering personnel consistent with ISMS Core Function #5 – "Feedback & Continuous Improvement." CGD related topics may include, but are not limited to: Implementation of immediate/compensatory measures resulting from 24590-WTP-GCA-MGT-15-00338-A, Commercial Grade Dedication Feedback/opportunities for improvement resulting from document reviews of: CGD plans CGD release forms Supplier submittals Appropriate use of various CGD document review checklists CGD Sampling Plans Feedback on results of Quality Engineering (QE) reviews Feedback on results of Client reviews (e.g. ORP CGD audit U-14-QAD-RPPWTP-003) Feedback on results of other internal / external reviews (e.g. RCA Report 24590-WTP-RCA-MGT-15-0338) Mentoring sessions may be conducted by CGD SMEs, Managers, Supervisors, or other personnel knowledgeable of the topic being discussed. Implementation of this action to be effective as of 10/05/2015. Develop presentation materials and conduct mentoring of WTP Procurement Engineering personnel. Identify members of the target audience required to receive the mentoring and document attendance on signed attendance sheets. 	The following objective evidence can be attached (electronically) to CA-7 in CAMP and / or identified by document number(s) identifiable and retrievable in InfoWorks: • Presentation materials developed to conduct mentoring. • Signed attendance sheets for target audience required to receive the mentoring, including any make-up sessions. • DACGDS01 LMS Qualification for SME's inclusive of those assigned to it.

processes.

Table 1 (Included CAP Actions 4-9) (384)

Table 1 (Included CAP Actions 4-9) (384)				
BNI Action				
24590-WTP-GCA-MGT-15-00338-A	Evidence of Completion			
This immediate action must remain in effect through implementation of CAs 11 – 16 of this CR.				
Note: This immediate action was created to address, in part, the following root cause and contributing causes resulting from 24590-WTP-RCA-MGT-15-0338, <i>Commercial Grade Dedication</i> :				
RC-1 - Procurement Engineering did not effectively manage some aspects of process execution				
CC-1 – Corrective actions from past CGD PIERs were partially effective.				
8. Incorporate Quality Engineering (QE) review of BCGD plans and VCGD submittals into 24590-WTP-GPG-ENG-0176, Quality Engineering Work Process:	The following objective evidence can be attached (electronically) to CA-8 in CAMP and / or identified by document number(s) identifiable			
Revise 24590-WTP-GPG-ENG-0176, Quality Engineering Work Process, to incorporate review of Bechtel CGD (BCGD) Plans. Revision to include a new QE Review Checklist (form) to facilitate review of BCGD Plans prior to approval and issuance. Perform an initial QE review of 100% of BCGD Plans using the revised guide/checklist (Form 24590-ENG-F00182) and 100% review of VCGD documents submitted under G321-E, Category 33, Commercial Grade Dedication Documentation, using the existing QE Review Checklist for Vendor Submittals (Form 24590-ENG-F00162). The initial percentages of 100% may be adjusted at a later date in accordance with the guide, based on results of reviews performed. Develop presentation materials for the revised guide (and new checklist) and conduct a briefing with WTP Procurement Engineering personnel and Quality Engineering personnel.	 Approved revision to 24590-WTP-GPG-ENG-0176, Quality Engineering Work Process, that includes a new QE Review Checklist (Form 24590-ENG-F00182) to facilitate review of BCGD Plans prior to approval and issuance. Presentation materials developed to conduct briefing(s) on the revised guide and new checklist. Signed attendance sheets for 			
Identify members of the target audience required to receive the briefing and document attendance on signed attendance sheets.	target audience required to receive the briefing, including any make-up sessions.			
Implementation of QE review to be effective as of 10/05/2015. The "later date" referenced above will be upon completion of CAs 11 – 16 of this CR.	LMS training completion record for QE and Responsible Engineer (RE) for the revised			
Note: This immediate/compensatory/corrective action was created to address, in part, the following root causes resulting from 24590-WTP-RCA-MGT-15-0338:	24590-WTP-GPG-ENG-0176, Quality Engineering Work Process guide and the 24590- WTP-3DP-G06T-00904,			
RC-1 - Procurement Engineering did not effectively manage some aspects of process execution	Evaluation of Commercial Grade Items PROE procedure,			
RC-2 - CGD process is handled differently than engineering	respectively.			

Table 1 (Included CAP Actions 4-9) (384)

BNI Action

24590-WTP-GCA-MGT-15-00338-A

Develop and Issue a "Completed CGD Package" Process for both BCGD and VCGD:

- Issue new form(s) with instructions for Procurement
 Engineering to perform a review of BCGD/VCGD related
 documents required by G321-E & G321-V forms as well as
 Bechtel generated CGD documentation (e.g. CGD survey
 report, source verification reports, and Receiving Inspection
 & Test (RI&T) generated inspection results).
- Revise affected procedures and instructions to establish a process for preparation and issuance of a completed CGD package. Include a release form(s) that facilitate identification of each activity required by the approved CGD plan (reference specific plan sections), and identification of objective evidence required to document and demonstrate successful completion of each required CGD activity. Procedure, form, and associated form instructions need to discuss identification of objective evidence required to support completion of required dedication activities. Objective evidence must be traceable and retrievable.
- Define required documentation criteria for items where the CGD release form will not be required. (e.g., concrete and grout).
- Develop presentation materials for the revised procedure and conduct a briefing with WTP Procurement Engineering personnel. Identify members of the target audience required to receive the briefing and document attendance on signed attendance sheets.

Implementation of this action to be effective as of 10/05/2015.

This immediate/compensatory action remains in effect through implementation of CAs 11 – 16 of this CR Retention as a CAPR will be evaluated when CAs 11-16 have been implemented.

Note: This immediate/compensatory was created to address, in part, the following root causes and observations resulting from 24590-WTP-RCA-MGT-15-0338 until long-term corrective actions are implemented:

- RC-1 Procurement Engineering did not effectively manage some aspects of process execution
- RC-2 CGD process is handled differently than engineering processes
- Obs-1: Document retrieval is difficult

Evidence of Completion

The following objective evidence can be attached (electronically) to CA-9 in CAMP and / or identified by document number(s) identifiable and retrievable in InfoWorks:

- New form(s) with instructions for Procurement Engineering to perform a preliminary review of CGD related submittals required by G321-E and G321-V forms and BCGD plans.
- Approved revision to procedure 24590-WTP-3DP-G06T-00904, Evaluation of Commercial Grade Items and Services, that addresses documentation requirement where the CGD release form is not employed.
- Presentation materials developed to conduct briefing(s) on the revised procedure.
- Signed attendance sheets for target audience required to receive the briefing, including any make-up sessions.

SECTION J – LIST OF ATTACHMENTS ATTACHMENT J ADVANCE UNDERSTANDING ON COSTS (384)

Subattachment C, Table 2

Table 2 (19 CGD Parking Lot Items) (384)

PL Item No	Description	Scope
1	What is the dedication package? How validated/accepted?	This alignment expectation requires that a CGD release form be populated demonstrating that all required CGD plan activities have been completed for BCGD and VCGD. This requires that the reviewer/ CGD release/report generator review CofC's, source verification reports, inspection and test reports, material test reports, factory acceptance test reports and any other document used to document objective evidence of critical characeristic verification. Each CGD plan required attribute and/or activity must be matched to the associated record or objective evidence to demonstrate completion. (Included in SOW, Standard 7(e)(3)(ii)(d) of MOD 415)
2	EQ & Seismic Considerations from Design addressed in CCFA & how documented	This alignment expectation requires that the basis for selection of the CC include how the CC may be related to EQ. (Included in SOW, Standard 7(e)(3)(ii)(d) of MOD 415)
3	Structure of Specification of CCFAs	This alignment expectation requires that the acceptance criteria be defined in a manner that is not interpretable whether that acceptance criteria is directly listed or referenced out to a code or standard. Additionally, engineering judgement required to substantiate that acceptance criteria must be documented in the CGD plan technical evaluation.
4	Define Complex Items / Design Process – differentiate between item complexity and procurement complexity (dedication at lower tier suppliers)	This alignment expectation requires additional guidance to be created for complex nuclear procurements, both BCGD and VCGD. Additional deliverables include a procurement strategy document and a supply chain map.
5	What is a source Verification Plan - vs Material Acceptance Plan (MAP) (level of detail Survey Plan model)	This alignment expectation requires the creation of a source verification checklist when performing source verification for CGD.
6	Item Part Number as a CCFA?	This alignment expectation requires that an item part number be verified. It will not be verified as part of CGD, rather the standard receipt inspection process.

PL Item No	Description	Scope
7	How do we use Design Information in Technical Evaluations to support critical characteristics for acceptance (CCFA) selection?	This alignment expectation requires a technical evaluation with credible failure modes identified when the design is not available. When the design is available, a technical evaluation with credible failure modes is not required. (Included in SOW, Standard 7(e)(3)(ii)(d) of MOD 415)
8	Material Chemistry specifications – full chemistry vs. partial	This alignment expectation requires technical justification when selecting a subset of material chemical properties for acceptance. MET will be producing a report that identifies the acceptable chemical values for typical materials procured at WTP.
9	Use of PMI vs. wet chemistry.	This alignment expectation requires that the use of equipment used to verify material chemistry (OES, XRF) to be defined in WTP design documents. (MET report) (Included in SOW, Standard 7(e)(3)(ii)(d) of MOD 415)
10	Refine definition of "Reasonable Assurance"	Documentation of the dedication activities must be complete enough for an independent, qualified reviewer to arrive at the same conclusion. Generated CGD packages shall provide reasonable assurance.
11	How do we implement industry guidance into the CGD Process?	This alignment expectation requires that a requirements basis report be produced to embody the outcome of the CGD Working Group.
12	Application of CGD Methods	This alignment expectation further defines the application of CGD acceptance methods, roles and responsibilities. This alignment expectation will evaluate the performance of Method 3 Source Verification by SQR. This alignment expectation will allow for the implementation of EPRI 5652 Rev. 1, Appendix F as an alternative means for nuclear procurement. (Included in SOW, Standard 7(e)(3)(ii)(d) of MOD 415)
13	Use of procurement specification to qualify commercial as NQA-1 vendor	This alignment expectation reiterates the ability to exercise the procurement option allowed by the graded approach to quality document. This allows BNI to quality a CM vendor using and NQA-1 audit by writing a tailored engineering and quality specification and placing the vendor on the ESL as an NQA-1 qualified vendor. BNI would, however, be required to dedicate all of the vendor's incoming material.
14	Resolve criteria for review of Supplier Submittals - Specs, Supplier Procedures?	This alignment expectation reiterates the requirement to review vendor documents to contract flow down requirements. In this item, the commitment made was that vendor CGD plans would comply to the contract flow down requirements (T0019) as well as the vendor's procedure.

PL Item No	Description	Scope
15	Effective use of Supplier Submittal during procurement reviews.	This alignment expectation reiterates the requirement to review vendor documents to contract flow down requirements. In this item, the commitment made was that vendor CGD plans would comply to the contract flow down requirements (T0019) as well as the vendor's procedure.
16	Work on Sampling Strategy method/ guidance.	This alignment expectation requires that when sampling is applied in a CGD plan, that the basis be EPRI TR-017218, Rev. 1. Additional guidance on generating and reviewing sampling plans will be provided to those executing the work.
17	When does a Credible Failure Modes (CFM) analysis/Failure Mode and Effects Analysis (FMEA) add value? How should they be used?	This alignment expectation requires a failure analysis be performed when the design information is not available. (Included in SOW, Standard 7(e)(3)(ii)(d) of MOD 415)
18	How to strengthen Commercial Procurements?	N/A
19	How do we monitor Vendors/Suppliers? How far down the supply chain should BNI monitor dedication activities, and how can a procurement map aid in this effort?	This alignment expectation requires dedication activities to be submitted from all sub-suppliers performing dedication to receive appropriate code status.

SECTION J – LIST OF ATTACHMENTS ATTACHMENT K LISTING OF WTP CONCEPTUAL DESIGN AND SUPPORTING INFORMATION

The following information associated with the WTP Conceptual Design and Supporting Information is provided at http://www.hanford.gov/orp/procure/solicitations/index.html.

The information includes:

(a) Process and Facility Design Documentation and Analyses

Facility Mass and Energy Balances
Process Description
Process and Facility Drawings
Systems Descriptions
Facility Descriptions
Facility Capability Studies
Facility Expansion Capability Study
Interface Control Documents

(b) Construction Planning

Engineering Execution Plan Construction Strategy Construction Mobilization Plan Facility Acceptance Strategy

(c) Technology Planning and Testing Information

Technology Development Plan Tank Waste Sample Analyses Technology Test Reports

(d) Waste Form Qualification Strategies

Products and Secondary Wastes Plan IHLW Waste Compliance Plan

(e) Environmental Permitting Documentation

Dangerous Waste Permit Application
Environmental Plan
Risk Assessment Work Plan
Approach for Immobilized High Level Waste (HLW) Delisting
Approach for Immobilized LAW Land Disposal Restrictions (LDR)
Compliance

Environmental Report Revision

(f) Integrated Safety Management Program, Hazards and Safety Analysis Information

Documentation prepared for, and correspondence between the DE-AC06-96RL13308 Contractor Organization and the U.S. Department of Energy (DOE) Regulatory Unit can be found at http://www.hanford.gov/osr/osr.asp.

(g) Cost and Schedule Documentation

Integrated Master Plan Government Fair Cost Estimate

(h) Quality Assurance

Quality Assurance Program Description.

SECTION J – LIST OF ATTACHMENTS ATTACHMENT L

Reserved

SECTION J – LIST OF ATTACHMENTS ATTACHMENT M DAVIS-BACON WAGE DETERMINATION

General Decision Number WA190002 dated May 3, 2010, is hereby incorporated as follows: (457)

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General Decision Number: WA190002 05/03/2019 WA2

Superseded General Decision Number: WA20180002

State: Washington

Construction Types: Building, Heavy and Highway

Counties: Benton and Franklin Counties in Washington. (D.O.E. HANFORD SITE ONLY)

BENTON AND FRANKLIN COUNTIES (D.O.E. HANFORD SITE ONLY) BUILDING (does not include residential construction consisting of single family homes and apartments up to and including 4 stories), HEAVY and HIGHWAY CONSTRUCTION

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.60 for calendar year 2019 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.60 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2019. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date 0 01/04/2019 1 05/03/2019

* SUWA2001-001 09/03/2001

(D.O.E. HANFORD SITE ONLY)

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR\$	36.17	20.13
BOILERMAKER\$	38.60	29.04
BRICKLAYER\$	31.90	17.14

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CARPENTER	22 40	1.0 1
Carpenters\$		16.4
Divers\$ Millwright & Machine		16.40
erector\$		19.83
Piledriver\$		16.40
Tenders\$	36.58	16.14
CEMENT MASON/CONCRETE FINISHER		
GROUP 1\$		14.13
GROUP 2\$		14.13
GROUP 3\$	30.20	14.13
DRYWALL FINISHER/TAPER\$	26.79	13.21
ELECTRICIAN		
Cable Splicers\$	45.68	3%+19.23
Electricians\$		3%+19.23
IRONWORKER\$	33.18	27.82
LABORER		
GROUP 1\$	26.84	12.95
GROUP 2\$		12.95
GROUP 3\$		12.95
GROUP 4\$		12.95
GROUP 5 (RATES PER SHIFT)	2	11.30
Sandhogs- $[(1-14 LBS), (6)]$		
HRS)]\$	222.00	12.55
Sandhogs-[(14-18 LBS),(6		
HRS)]\$	226.93	12.55
Sandhogs-[(18-22 LBS),(6		
HRS)]\$	249.07	12.55
Sandhogs-[(18-25 LBS), (4		
HRS)]\$ Sandhogs-[(22-26 LBS),(4	227.21	12.55
HRS)]\$	221 52	12.55
Sandhogs-[(26-32 LBS),(4	231.33	12.33
HRS)]\$	23/-15	12.55
Sandhogs-[(32-38 LBS),(3		12.00
HRS)]\$	237.11	12.55
Sandhogs-[(38-44 LBS),(2		
HRS)]\$	237.52	12.55
GROUP 5		
Outside Lock and Gauge		
Tender\$		12.55
GROUP 6\$		12.55
GROUP 7\$		12.55
GROUP 8\$	28.20	12.55
GROUP 9\$	28.54	12.55
PAINTER (Soft Floor Covers,		
Glaziers, Spray Painters,		
Steel Painters, Steam Clean		
and Acid Etching, Sign		
Writers)\$	26 19	11.1
		dri vile
PLUMBER/PIPEFITTER\$	49.24	28.79
BOURD BOULDWINE COST		
POWER EQUIPMENT OPERATOR		

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GROUP 1. \$ GROUP 2. \$ GROUP 3. \$ GROUP 4. \$ GROUP 5. \$ GROUP 6. \$ GROUP 7. \$ GROUP 8. \$	27.83 28.44 28.76 29.04 29.31 30.41	15.95 15.95 15.95 15.95 15.95 15.95 15.95
ROOFER (Including		
Waterproofer and Kettleman)\$	27.43	12.78
SHEET METAL WORKER\$	36.90	22.73
SPRINKLER FITTER\$	34.45	22.37
TRUCK DRIVER		
GROUP 1\$		17.92
GROUP 2\$	27.50	17.92
GROUP 3\$	27.61	17.92
GROUP 4\$		17.92
GROUP 5\$		17.92
GROUP 6\$		17.92
GROUP 7\$		17.92
GROUP 8\$	28.91	17.92

CEMENT MASON CLASSIFICATIONS

GROUP 1: Rodding, tamping, floating, troweling, patching, stoning, rubbing, sack rubbing; All exposed aggregate finishing and sealing. All architectural finishing, staining, stamping and coloring, washing and power washing of concrete, polymer, latex and composite materials; Setting of screeds, screeds forms, curb and gutter and sidewalk forms; Preparation of all concrete for caulking of the joints and the caulking of expansion joints; Preparation of concrete for the application of hardners, sealers and curing compounds and their application; Grouting and dry packing of machine base; Removal of snap ties and she bolts prior to patching of concrete

GROUP 2: Power troweling machine operator; Troweling of magnesite, torganal or material with epoxy bases of oxichloride base; All power grinders, bushing hammer, chipping gun; Gunite Nozzleman. All sandblasting for architectural finishes, patch preparation and exposing of aggregate for finish; Concrete sawing and cutting for concrete and expansion joints and scoring for decorative patterns; Operating of Clary-type floats, Longitudinal Floats, Rodding Machines and Belting Machines; Scarifiers; Working on scaffolds
GROUP 3: Grinding, bushing or chipping of toxic materials or high density concrete; Operating of power tools on a scaffold

LABORER CLASSIFICATIONS

GROUP 1: Flagman, Landscape Laborer, Scaleman, Traffic Control Supervisor, Asbestos Abatement Worker, Brick Pavers (to include the installation of brick or grass pavers for sidewalks, driveways, streets and parking lots), Brush Hog

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Feeder; Carpenter Tender; Cement Handler; Concrete Signalman; Concrete Crewman (to include Stripping of forms, hand operating jacks on slip form construction, application of concrete curing compounds, pumpcrete machine, signaling, handling the nozzle of squeezcrete or similar machine- 6 inches and smaller); Confined Space Attendant, Crusher Feeder; Demolition (to include clean-up, burning, loading, wrecking and salvage of all material); Dry Stack Walls (including all dry stack walls, including keystone walls and others using blocks and interlocking pegs.), Dumpman; Traffic Control Laborer (To include but is not limited to, erection and maintenance of barricades, signs and relief of flag person.), Window Washer/Cleaner, Pilot Car, Hazardous Waster Worker, Erosion Control Laborer, Fence Erector, Guard Rail (to include Guard Rail, guide and reference posts, sign posts, and right-of-way markers); Firewatch. Form cleaning machine feeder; Stacker; General Laborer; Group Machine Header Tender; Miner, Class "A" (to include bull gang, concrete crewman, dumpman and pumpcrete crewman, including distributing pipe, assembly and dismantle, and nipper); Lead Abatment Worker, Mold Abatement Worker, Nipper; Riprap Man; Sandblast Tailhoseman, Scaffold Erector (wood or steel); Stake Jumper; Structural Mover (to include separating foundation, preparation, cribbing, shoring, jacking and unloading of structures); Tailhoseman (water nozzle); Timber Bucker and Faller (by hand); Track Laborer (RR); Truck Loader; Wellpoint Man; (HDPE or similar liner installer).

GROUP 2: Asphalt Roller, walking; Cement Finisher Tender; Concrete Saw, walking; Demolition Torch; Dope Pot Fireman, non-mechanical; Driller Tender (when required to move and position machine); Form Setter, paving; Jackhammer Operator; Miner, Class "B" (to include brakeman, finisher, vibrator, and form setter); Nozzleman (to include squeeze and flow-crete nozzle); Nozzleman, water, (to include fire hose), air or steam; Pavement Breaker (under 90 lbs); Pipelayer, corrugated metal and multi-plate; Pot Tender; Power Buggy Operator; Power Tool Operator, gas, electrical, pneumatic; Rodder and Spreader; Trencher, Shawnee; Tugger Operator; Wagon Drills; Wheelbarrow, power driven; Water Pipe Liner, Rigger/Signalperson, Remote Equipment Operator (i.e., compaction and demolition) Compaction Equipment (to include all hand operated power compaction equipment); Railroad Power Spiker or Puller, dual mobile; Railroad Equipment, power driven, except dual mobile power spiker or puller.

GROUP 3: Air and Hydraulic Track Drill, Asphalt Raker, Brush Machine (to include Horizontal construction joint clean-up brush machine, power propelled); Caisson Worker, free air; Chain Saw Operator and Faller; Concrete Stack (to include Laborers when working on free standing concrete stacks for smoke or fume control above 40 ft high); Gunnite (to include operation of machine and nozzle); High Scaler; Miner, Class "C" (to include miner, nozzleman for concrete, laser beam operator, and Rigger on tunnels); Monitor Operator (air track or similar mounting); Mortar Mixer; Nozzleman (to include jet blasting nozzleman, over 1200 lbs., jet blast machine, power propelled, sandblast nozzle,

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Squeeze and Flo-crete nozzle); Pavement Breaker, 90 lbs. & over; Pipelayer (to include working topman, caulker, collarman, jointer, mortarman, rigger, jacker, shorer, valve or meter installer, temper, (Including pressurized and non-pressurized ductile pipe, gravity pipe and HDPE (fused and non-fused); Pipewrapper; Plasterer Tender, Trenchless Technology, Vibrators (all); Laser Beam Operator (Elevation Control; Technician)

GROUP 4: Drills with dual masts, Miner, Class "D"(to include Raise and Shaft Miner, Laser Beam Operator on raises and shafts.) Welder, electric, manual or automatic, Remote Equipment Operator (to include HDPE or similar pipe and liner)

GROUP 5: Sandhogs under compressed air (rates increases are computed by multiplying the increase $x \ 8$ hr shift and add total to the previous rate)

GROUP 6: Construction Specialist

GROUP 7: Hod Carrier

GROUP 8: Powderman

GROUP 9: Grade Checker

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Bit Grinders; Bolt Threading Machine; Compressors (under 2000 CFM, gas, diesel or electric power); Crusher Feeder (mechanical); Deck Hand; Drillers Tender; Fireman and Heater Tender; Grade Checker; Tender Mechanic, Welder H.D.; Hydro- seeder, Mulcher, Nozzleman; Oiler; Oiler and Cable Tender, Mucking Machine; Pumpman; Rollers, all types on subgrade (farm type, Case, John Deere and similar, or Compacting Vibrator), except when pulled by Dozer with operable blade; Steam Cleaner; Welding Machine

GROUP 2: A-Frame Truck (single drum); Assistant Refrigeration Plant (under 1000 ton); Assistant Plant Operator, Fireman or Pugmixer (asphalt); Bagley or Stationary Scraper; Belt Finishing Machine; Blower Operator (cement); Cement Hog; Compresor (2000 CFM or over, 2 or more, gas, diesel or electric power); Concrete Saw (multiple cut); Distributor Leverman; Ditch Witch or similar; Elevator, hoisting materials; Dope Pots (power agitated); Fork Lift or Lumber Stacker, Hydra-lift and similar; Gin Trucks (pipeline); Hoist, single drum; Loaders (bucket, elevators and conveyors); Longitudinal Float; Mixer (portable - concrete); Pavement Breaker, Hydra-hammer and similar; Power Broom; Spray Curing Machine (concrete); Spreader Box (self-propelled); Straddle Buggy (Ross and similar on construction job only); Tractor (Farm type R/T with attachments, except Backhoe); Tugger Operator

GROUP 3: A-Frame Truck (2 or more drums); Assistant Regrigeration Plant and Chiller Operator (over 1000 ton); Backfillers (Cleveland and similar); Batch Plant and Wet Mix Operator single unit (concrete); Belt-crete Conveyors

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with power pack or similar; Belt Laoder (Kocal or similar); Bend Machine; Bob Cat; Boring Machine (earth); Boring Machine (rock under 8 inch bit) (Quarry Master, Joy or similar); Bump Cutter (Wayne, Saginau or similar); Canal Lining Machine (concrete) Chipper (without crane), Cleaning and Doping Machine (pipeline); Curb Extruder (Asphalt and Concrete); Deck Engineer; Elevating Belt-type Loader (Euclid, Barber Green and similar); Elevating Grader-type Loader (Dumor, Adams or similar); Generator Plant Engineers (diesel, electric); Gunite Combination Mixer and Compressor; Locomotive Engineer; Mixermobile; Posthole Auger or Punch; Pump (grout or jet); Soil Stabilizer (P & Hor similar); Spreader Machine; Surface Heater and Planer Machine; Tractor (to D-6 or equivalent) and Traxacavator; Traverse Finish Machine; Turnhead Operator

GROUP 4: Blade Operator (motor patrol and attachments); Concrete Pumps (squeeze-crete, flow-crete, pump-crete, Whitman and similar); Drilling Equipment (8 inch bit and over) (Robbins, reverse circulation and similar); Drills (Churn, Core, Calyx, or Diamond); Equipment Serviceman, Greaser and Oiler; Hoe Ram; Hoist (2 or more drums or Tower Hoist); Loaders (overhead and front-end, under 4 yards R/T); Paving (Dual Drum) Rubber Tire; Refrigeration Plant Engineers (under 1000 ton); Signalman (Whileys, Highline, Hammerheads or similar); Skidders (R/T with or without attachments); Screed Operator; Trenching Machines (under 7 ft depth capacity); Vacuum Drill (reverse circulation drill under 8 inch bit)

GROUP 5: Automatic Subgrader (Ditches and Trimmers) (Autograde, ABC, R.A. Hansen and similar on grade wire); Backhoe (under 1 yd); Batch Plant (over 4 units); Batch and Wet Mix Operator (mutiple units, 2 and including 4); Boat Operator; Cableway Controller (dispatcher); Concrete Pump Boom Truck; Conveyor Aggregate Placement Equipment; Cranes (25 tons and under); Derricks and Stifflegs (under 65 tons); Drill Doctor; Multiple Dozer Units with single blade; Paving Machine (asphalt and concrete); Piledriving Engineers; Rollerman (finishing pavement); Trenching Machines (7 ft depth and over)

GROUP 6: Asphalt Plant Operator (Backhoes (1 yd to 3 yds); Blade (finish and bluetop) Automatic, CMI, ABC and similar when used as automatic; Boom Cats (side); Cableway Operators; Clamshell Operators (under 3 yds); Concrete Slip Form Paver; Cranes (over 25 tons, including 45 tons); Crusher, Grizzle and Screening Plant Operator; Draglines (under 3 yds); Elevating Belt (holland type); Gradall (1 yd to 3 yds); Loader Operator (front-end and overhead, 4 yards, including 8 yds); Mucking Machine; Quadtrack or similar equipment; Rubber-tired Scrapers; Shovels (under 3 yds); Tractors (D-6 and equivalent and over); Vactor Guzzler, Super Sucker; Concrete Cleaning/Decontamination Machine; Ultra High Pressure Waterjet Cutting Tool System (30,000 psi)

GROUP 7: Backhoes (3 yds and over); Cranes (All Cranesover 45 tons, including 100 tons) Climbing, Rail and Tower Cranes up to including 45 tons; Clamshell Operator (3 yds. and

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over); Derricks and Stifflegs (65 tons and over); Draglines (3 yds and over); Lead Water Well Driller; Loader (360 degrees revolving Koehring Scooper or similar); Loaders (overhead and front-end, over 8 yds); Shovels (3 yds and over); Whirleys and Hammerheads, all; Vacuum Blasting Machine Operator; HD Mechanic/welder

GROUP 8: Cranes (all cranes over 100 tons); Climbing, Rail and Tower Cranes over 45 tons

ALL CRANE BOOMS, INCLUDING TOWER CRANES:
Measure from center of rotation to center of shaft (radius):
130 ft To 200 ft .50 hr. additional to classification
Over 200 ft .80 hr. additional to classification

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Escort Driver or Pilot Car tender and swamper, Pickup Hauling Employees or Materials

GROUP 2: Flat Bed Truck, single rear axle; Fork Lift, 3000 lbs and under; Leverperson Loading Trucks at Bunkers; Seeder and Mulcher; Stationary Fuel Operator; Team Driver; Tractor (small rubber tired, pulling trailer or similar equipment); Trailer Mounted hydro Seeder and Mulcher; Water Tank Truck, up to 1800 gallons

GROUP 3: Bus Driver or Employee Haul Driver; Flat Bed Truck, dual rear axle; Power Boat hauling employees or material

GROUP 4: Buggy Mobile and similar; Bulk Cement Tanks and Spreader; Power Operated Sweeper; Straddle Carrier (Ross, Hyster and similar); Water Tank Truck, 1801-4000 gallons

GROUP 5: Auto Crane, 2000 lbs capacity; Dumptor (6 yds and under); Flat Bed Truck (with hydraulic system); Fork Lift (3001-16,000 lbs); Fuel Truck Driver, steam cleaner and washer; Rubber-tired Tunnel Jumbo; Scissors Truck; Slurry Truck Driver; Transite Mixers & mixers hauling concrete 3 yd to and including 6 yd.; Wrecker and Tow Trucks

GROUP 6: A-Frame; Service Greaser; Tireperson; Truck, side, end, and bottom & articulated end dump (up to and including 12 yds); Water Tank Truck, 4001 to 8000 gallons, Warehouseperson, to include shipping and receiving

GROUP 7: Dumps, semi-end; Flagerty Spreader Box Driver; Flowboys; Fork lift, 16,000 lbs and over; Lowboy, 50 tons and under; Mechanic, Field; Oil Distributors Driver (road, bootperson, leverperson); and Oil Tank Driver; Self-Loading Roll Off and Dumpster over 6 yds; Stringer Truck (cable operated trailer); Tractor with Steer Trailer; Transfer Truck & Trailer; Transif Mixers & Truck Hauling Concrete: over 6 yards to and including 20 yards; Truck & Pup; Trucks, side, end, bottom, & articulated end dump: over 12 yards to and including 100 yards; Truck Mounted Crane (with load-bearing surface, either mounted or pulled) up to 14 tons; Turnarocker, DWs & similar, with 2 or or more 4 wheel-power tractor with trailer, gallonage or yardage

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scale, whichever is greater; Vacuum truck (super sucker, guzzler, etc.); Water Tank Truck, 8,001 to 14,000; Semi-truck and Trailer, 50 tons and under Lowboy

GROUP 8: Lowboy, over 50 tons; Prime movers & stinger truck; Transit Mixers and truck hauling concrete, over 20 yards; Trucks, side, end bottom and articulated end dump, over 100 yards.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this

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classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination

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- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

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SECTION J – LIST OF ATTACHMENTS ATTACHMENT N ALTERNATIVE DISPUTE RESOLUTION (147)

Purpose: Contract Clause H.34, "Alternative Dispute Resolution" (ADR) provisions were established to facilitate the early resolution of disputes. This procedure defines the agreed continued ADR process for selection and utilization of a "Standing Neutral" (SN) in the instance an agreement cannot be reached through informal negotiations.

Scope: In recognition of mutual interests, the U.S. Department of Energy (DOE) and Bechtel National, Inc. (BNI), "the Parties," shall use their best efforts to informally resolve any dispute, claim, question, or disagreement ("the issue"), by consulting and negotiating with each other in good faith and attempting to reach a just and equitable solution satisfactory to both Parties. If an agreement cannot be reached through informal negotiations, then such disagreement shall be referred to the SN, pursuant to the following selection and proceeding process.

Process: When informal negotiations reach an impasse, either Party may initiate the continued ADR process, utilizing a SN, by issuing a written ADR proceeding notification to the other Party. The Party issuing notice shall propose two (2) SN candidates for consideration by the other Party. The proposed candidates shall have proven expertise in the area of disagreement. If a SN cannot be agreed upon within ten (10) business days, the DOE Office of Dispute Resolution shall assist the Parties in this selection. At any point during the ADR proceedings either Party may acquiesce to the other Party's position, and the dispute shall be considered resolved.

It shall be incumbent on both Parties to fully discuss and demonstrate how the issue has or will adversely affect that Party's ability to perform its contractual requirements in a timely and cost efficient manner. Accordingly, within ten (10) business days of the ADR proceeding notification, both Parties shall submit, in writing, a "Resolution Memorandum" (RM) to the other Party and SN defining the issue and describing its recommendation for resolution. The RM shall address all relevant facts, which would include, as appropriate, discussion regarding an alleged impact event, work scope affected, and the contractual and equitable basis for proposed settlement. If any cost and schedule adjustments are recommended, the basis for such adjustments shall be quantified.

Following RM review, the SN shall establish a meeting time and place for convening the ADR meeting. The SN, not later than fifteen (15) business days following ADR proceeding notification, shall issue an agenda for the meeting. The agenda shall allow each Party the opportunity to fully explain its position regarding the issue and allow for an exchange of dialogue. The SN shall ensure a meeting attendance sheet is completed and formal meeting minutes are issued to both Parties within three (3) business days of the meeting date.

The Parties shall jointly meet with the SN to discuss the issue. Each Party shall be allowed up to three (3) representatives for meeting attendance, inclusive of a spokesman, to address the technical, financial, and contractual merits of the issue. Each Party shall be free to select its own representatives as it sees fit. The representative selections shall be identified in writing, by name and title, to the SN and other Party within ten (10) business days following ADR proceeding notification. The Parties and SN shall initially meet, at a mutually agreeable time and place, no later than thirty (30) calendar days from the date of ADR proceeding notification. The need for subsequent meetings shall jointly be agreed.

The SN shall evaluate all facts and provide a written settlement recommendation to both Parties no later than ten (10) business days following the last meeting. The subject recommendation shall discuss, as appropriate, the alleged impact event, perceived work scope affected, and cite its contractual and equitable basis for settlement or rejection. In the instance certain cost and schedule adjustments are recommended, the basis for such adjustments shall be quantified.

Although the SN settlement recommendation shall be considered nonbinding, in the interest of early dispute resolution, both Parties shall seriously consider such advisement. The DOE Contracting Officer shall issue the final DOE written dispute determination to BNI within five (5) business days after receipt of

the SN's settlement recommendation. BNI shall advise the Contracting Officer, in writing, of the acceptability of the DOE dispute determination within five (5) business days after its receipt. The SN shall be copied on all such correspondence.

At this point the ADR process, utilizing a SN, shall be considered closed. If the dispute has not been resolved through the SN process, either Party may request resolution under the Disputes Clause of this Contract.

SECTION J — LIST OF ATTACHMENTS ATTACHMENT O LIST OF EXCLUSIONS UNDER FAR 52.225-11 (b) (3) BUY AMERICAN ACT — CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS

Material Description	Modification No.
Purchases under \$100,000 for construction material — replacement parts that must be acquired from the original foreign manufacturer or supplier, either directly or indirectly, because such parts are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality, or use of domestic parts would invalidate manufacturer/supplier warranties, or adversely affects the system safety or performance function. The Contractor must use good faith efforts to acquire construction material that complies with the <i>Buy American Act</i> , and document justification and determination of inapplicability for use of foreign materials in accordance with FAR 25.205(a); and paragraph (c)(1) of this clause. DEAR 925.202 states that if the cost of the materials is expected to exceed \$100,000, the Head of the Contracting Activity shall approve the determination. The Contractor shall not split acquisitions to avoid exceeding the acquisition threshold stated herein. Acquisition of foreign construction material that exceeds the \$100,000 threshold, must be submitted to the Contracting Officer to obtain Head of the Contracting Activity approval. BNI must submit an annual report to the Contracting Officer for all foreign construction materials purchased under this paragraph. The report shall state the materials, acquisition price, vendor, and country of origin. The Contracting Officer reserves the right to re-negotiate consideration in accordance with FAR 25.205(c) if determined in the Government's best interest.	184
Purchase of screwed ductile iron fittings and screwed cast iron fittings for the WTP fire protection system under Subcontract No. 24590-CM-HC1-PY21-00002.	189
Purchase of non-safety Pressure Differential Gauges, with Dial Indication, 4.5 inch, type 1133, under Subcontract No. 24590-CM-POA-JP01-00001.	303
Purchase of Tie Rods for Modification to Onsite Safeflex Expansion Joints under Purchase Order 24590-CM-POA-MERK-00001.	303
Purchase of 41 Colton Vacuum Breakers, Model CVB-200SS under Purchase Order 24590-CM-POA-PY01-00011.	353

SECTION J – LIST OF ATTACHMENTS ATTACHMENT P COMPLETION DEFINITION SHEETS FOR INCENTIVE FEES (384)(508)

Line #	PBI	Milestone
A-1	EPC	Install Caustic Scrubber Vessel
A-2	EPC	Complete Final Assembly of Melter #1
A-3	EPC	Complete Final Assembly of Melter #2
A-4	EPC	Complete LAW Bulk Cable EI +48
A-5	EPC	LBL Physical Plant Complete
B-1	S/U & C	ORP (safety evaluation report [SER]) approval of LAW Documented Safety Analysis (DSA)
B-2	S/U & C	LAB Startup Testing Complete
B-3	S/U & C	LAW Startup Testing Complete
B-4	S/U & C	EMF Startup Testing Complete
B-5	S/U & C	LAB Readiness to Operate
B-6	S/U & C	LAW DOE Headquarters Operational Readiness Review (ORR) complete
B-7	S/U & C	Declare Readiness to Receive Anhydrous Ammonia
B-8	S/U & C	Successful Demonstration of Hot Commissioning
DF-01		DFLAW CLIN 2.1
DF-02		DFLAW CLIN 2.1
DF-03		DFLAW CLIN 2.1

CONTRACT FEE MILESTONES

The following conditions apply to all fee-bearing milestones:

- Key predecessor activities listed on the milestone sheets will be complete.
- DOE-WTP will confirm completion within thirty (30) days of receiving the documentation.
- BNI will provide a listing of any milestone exceptions and open quality documents (including punch lists, construction deficiency reports, nonconformance reports, field changes, and vendor documentation) that do not functionally impact or impede successor activities, along with justification for each one.
- DOE-WTP has the final authority for the acceptance of milestone completions subject to the dispute provisions of this Contract.
- Any changes that occur after the achievement of the milestone will not invalidate completion.
- All documents (including memoranda providing copies of interim documents), drawings, calculations, and specifications will be available for review in Project Document Control and will be readily accessible to DOE-WTP.

Interim Milestone A-1, LBL Physical Plant Complete Performance Based Incentive Fee

Facility	Activity ID	Description	
LAW	4LL4608B10	Install Caustic Scrubber Vessel	

Milestone Definition

Install the caustic scrubber in its final location in order to facilitate the completion of the 48-foot elevation of the LAW Facility. This piece of equipment is located in the central region of the 48-foot elevation of the LAW building and is the keystone to facilitating the completion activities for the offgas systems in the upper elevation of the LAW building (+48-foot elevation).

- a) Complete the Material Receiving Report associated with the receipt of the caustic scrubber.
- b) Close all nonconformance reports associated with the caustic scrubber.
- c) Set the caustic scrubber in its final location on anchor bolts.
- d) Install internal components in the caustic scrubber vessel.

Inclusions

N/A

Exclusions

N/A

Objective Evidence of Milestone Completion and Key Predecessors

This milestone shall be considered complete upon installation of the caustic scrubber in its final location on anchor bolts with the internal components installed. This will be demonstrated by:

- Completion of the milestone will include issuance to Project Document Control of the G321V. In addition, completion of this milestone will include a screen shot from the Bechtel Procurement System demonstrating that the material receiving report number has been issued for the specific shipment and the material receiving report has been completed and issued by Project Document Control.
- Completion of the schedule activity codes listed in the table below for the installation of the caustic scrubber vessel.

DOE shall provide concurrence regarding the acceptability of the submission or provide notice of material deficiencies within thirty (30) calendar days of receipt. In the event DOE provides notice of material deficiencies after thirty (30) calendar days, the Contractor shall be granted day for day relief to the schedule decrement outlined in Section B, "Supplies or Services and Prices/Costs," Attachment B-2-E, "Incentive Fee E - LBL Physical Plant Complete Performance Based Incentive Fee."

Activity ID	Description
9FL4610210	LAW - QN - Ship - LVP-SCB-01 - Caustic Scrubber - QL-MRA-MKAS-00003
9FL4610230	LAW - QN - DMY - LVP-SCB-01 - Caustic Scrubber - QL-MRA-MKAS-00003
9ZL4610250	LAW - QN - QC/MRR - LVP-SCB-01 - Caustic Scrubber -QL-MRA-MKAS-00003
4LL4608B10	Install Melter Offgas Caustic Scrubber (LVP-SCB-00001) PA08B EL+48

Interim Milestone A-2 LBL Physical Plant Complete Performance Based Incentive Fee

Facility	Activity ID	Description	
LAW	4LL4602B90	Complete Final Assembly of Melter #1	

Milestone Definition

Complete final structural assembly of Melter #1 as described by Hold Point 22 of the specification entitled Site Assembly of LAW Melter, document number 24590-LAW-3PS-LMP-T00002, which states:

Contractor to verify Shielded Lid welds completed IAW WTP-M-11960 and Shield Lid position, relative the Gas Barrier Lid, has not changed as verified with the previously installed measuring instruments.

Inclusions

Shielded Lid Installation includes:

- Connecting the gas barrier lid cooling water pipe flanges to the cooling water supply header flex hoses, reinstalling the Shielded Lid Northeast Side Cooling Water Access Flange Cover and the North Side West Cooling Water Access Flange Cover.
- Welding the shielded lid to the shielded wall.
- Inspection and/or nondestructive examination of welding and assembly as applicable.
- Measuring any shifting of the shielded lid ports in respect to the gas barrier lid ports during the shielded lid to shielded wall welding.
- Nonconformance issues pertinent to lid installation have been closed.

Exclusions

- Utility hook-ups.
- Piping connections.

Objective Evidence of Milestone Completion and Key Predecessor

This milestone shall be considered complete upon the installation of Melter #1 Lid Refractories and completion of the welding of the shield lid to the melter. Evidence of completion includes:

- Copy of inspection reports with signoffs this includes visual weld examination records, nondestructive examination records, and pipe/flange assembly inspection records
- Copy of inspection report with signoffs confirming acceptable condition or replacement if required-- of Shielded Lid North Side East and North Side West Cooling Water Access Flange Cover gaskets
- Copy of inspection report with signoffs confirming the Shielded Lid position relative to the Gas Barrier Lid did not change during welding
- Nonconformance issues pertinent to lid installation have been closed

DOE shall provide concurrence regarding the acceptability of the submission or provide notice of material deficiencies within thirty (30) calendar days of receipt. In the event DOE provides notice of material deficiencies after thirty (30) calendar days, the Contractor shall be granted day for day relief to the schedule decrement outlined in Section B, "Supplies or Services and Prices/Costs," Attachment B-2-E, "Incentive Fee E – LBL Physical Plant Complete Performance Based Incentive Fee."

Activity ID	Description
4LL4601B89	LAW – Melter #1 Complete Melter Lid Castable Placements
4LL4602B90	LAW – Melter #1 Install and Weld Shield Lid

Interim Milestone A-3, LBL Physical Plant Complete Performance Based Incentive Fee

Facility	Activity ID	Description
LAW	4LL4602B89	Complete Final Assembly of Melter #2

Milestone Definition

Complete final structural assembly of Melter #2 as described by Hold Point 22 of the specification entitled, *Site Assembly of LAW Melters*, document number 24590-KAW-3PS-LMP-T00002, Rev. 2 (effective March 24, 2016), which states:

Contractor to verify Shielded Lid welds completed IAW WTP-M-11960 and Shield Lid position, relative to the Gas Barrier Lid, has not changed, as verified with the previously installed measuring instruments.

Inclusions

Shielded Lid Installation included:

- Connecting the Gas Barrier Lid cooling water pipe flanges to the cooling water supply header flex hoses. Reinstalling the shielded Lid Northeast Sided Cooling Water Access Flange cover and the North side West Cooling Water Access Flange cover.
- Welding the Shielded Lid to the Shielded Wall.
- Inspection and/or nondestructive examination of welding and assembly as applicable.
- Measuring any shifting of the Shielded Lid ports in respect to the Gas Barrier Lid port during the Shielded Lid to Shielded Wall welding.
- Nonconformance issues pertinent to lid installation have been closed.

Exclusions

- Utility hook-ups.
- Piping connections.

Objective Evidence of Milestone Completion and Key Predecessor

This milestone shall be considered complete upon the installation of Melter #2 Lid Refractories and completion of the welding of the Shield Lid to the melter. Evidence of completion includes:

- Copy of inspection reports with signoffs this includes visual weld examination records, nondestructive examination records, and pipe/flange assembly inspection records
- Copy of inspection report with signoffs confirming acceptable condition or replacement if required – of Shielded Lid North Side East and North Side West Cooling Water Access Flange Cover gaskets
- Copy of inspection report with signoffs confirming the Shielded Lid position relative to the Gas Barrier Lid did not change during welding
- Nonconformance issues pertinent to lid installation have been closed.

DOE shall provide concurrence regarding the acceptability of the submission or provide notice of material deficiencies within thirty (30) calendar days of receipt. In the event DOE provides notice of material deficiencies after thirty (30) calendar days, the Contractor shall be granted day for day relief to the

schedule decrement outlined in Section B, "Supplies or Services and Prices/Costs,"Attachment B-2-E, "Incentive Fee E - LBL Physical Plant Complete Performance Based Incentive Fee."

Activity ID	Description
4LL4601B90	LAW – Melter #2 Complete Melter Lid Castable Placements
4LL4602B89	LAW – Melter #2 Install and Weld Shield Lid

Milestone A-4 LBL Physical Plant Complete Performance Based Incentive Fee

Facility	Activity ID	Description	
LAW	4LL1610512	Complete LAW Bulk Cable EI +48	

Milestone Definition

Complete the bulk wire pulls associated with the last LAW elevation (+48 feet). Complete all SetRoute cards related to "LAW-Installation of Scheduled Bulk Cable EL+48."

Inclusions

This includes all scheduled power, control, instrumentation, and fiber optic cables including completion of all raceway systems (cable tray and raceways), and completed inspections records ensuring contractual requirements (design, codes, and standards). Electrical wiring is complete.

Exclusions

N/A

Objective Evidence of Milestone Completion and Key Predecessors

- This milestone shall be considered complete upon the completion of LAW Bulk Cable campaign at elevation +48 feet. The raceway and cable lists will be generated from Setroute four
 (4) months prior to the milestone completion date. Set Route inspection records
 - Raceway installation cards complete
 - Cable installation cards complete
- Turnover Exception Report.

All A Punch List items complete as defined in procedure 24590-WTP-GPP-CON-1603.

DOE shall provide concurrence regarding the acceptability of the submission or provide notice of material deficiencies within thirty (30) calendar days of receipt. In the event DOE provides notice of material deficiencies after thirty (30) calendar days, the Contractor shall be granted day for day relief to the schedule decrement outlined in Section B, "Supplies or Services and Prices/Costs," Attachment B-2-E, "Incentive Fee E - LBL Physical Plant Complete Performance Based Incentive Fee."

Activity ID	Description
4LL1610512	LAW-Installation of Scheduled Bulk Cable EL+48
4LL16132N7	LAW-Completion of Cable Tray EL+48 (Part 2)
4LL16COND12	LAW-Completion of Scheduled Conduit EL+48 (Phase B)

Milestone A-5 Final LBL Physical Plant Complete Performance Based Incentive Fee

Facility	Activity ID	Description
LAW	4LL0000999	LBL Physical Plant Complete

Milestone Definition

This milestone is achieved when the LAW Facility is constructed and major mechanical and electrical systems have been installed. This includes completion of the building structure; the installation, testing, and inspection of equipment and piping; installation of electrical raceway and cables, instrumentation, tubing, permanent lighting, grounding, and lighting protection. LAB and BOF facilities, which support DFLAW operations must also be constructed, as defined in the "Objective Evidence of Milestone Complete" section.

Inclusions

Completed scope includes scheduled activities tied to "Physical Plant complete" identified in Table C.5-1.1, Deliverable 1.13. The following building components/items will be finished at LAW Physical Plant complete stage:

- Building structure is complete, including architectural finishes walls, doors, and penetrations
- LAW mechanical systems are complete:
 - Equipment is installed, tested, and inspected
 - Piping is installed, tested, and inspected
 - Vessels installed, tested, and inspected
 - Ventilation systems installed, tested, and inspected
- Electrical raceway, cables, and terminations installed:
 - Instrumentation racks, instrumentation, and associated tubing are installed
 - Permanent lighting, grounding, and lightning protection for the facility are complete
 - Control and communication systems are installed
 - Motor control centers are installed.

Exclusions

Elements of work, which remain unfinished or are yet to be performed, which do not prevent the testing of systems, in part or in whole, for its intended purpose as identified in Table C.5-1.1, Deliverable 1.13.

- Type B Punch List-like items as identified in procedure 25490-WTP-GPP-CON-1603
- Intentionally excluded items necessary to facilitate startup activities
- Items subject to obsolescence and maintenance
- Installation of components deferred to protect government property

All new safety-significant components as defined in the completed PrHA tables and the preliminary documented safety analysis (PDSA) - DSA evolution.

Objective Evidence of Milestone Completion and Key Predecessors

This milestone shall be considered complete upon the completion of all the associated LAW "Physical Plant complete" activity IDs as delineated in Table C.5-1.1, Deliverable 1.13.

The activities can be compared to the completed construction installation inspection media (depending upon function/discipline) to ensure all of those scoped for completion are complete. For instance, for

electrical construction installations, Setroute cards associated with those electrical scheduled items can be verified as complete.

All ninety (90) percent design reviews are completed and all actions except for B Punch List items are complete.

At completion of this milestone, the LAB will be construction-complete for servicing DFLAW operations, with temporary isolations in place for ventilation system components necessary to support HLW and PT. These modifications will allow the LAB systems to be tested for DFLAW operations. Remaining LAB scope necessary for HLW and PT will be deferred until needed to support HLW operations.

The BOF will be constructed and in startup testing for DFLAW operations. This includes reconfiguration of the systems for DFLAW demand and isolations of systems to allow for operations of DFLAW with concurrent construction in HLW and PT. CLIN 2.0 work added to BOF necessary to bypass PT will be under construction. This includes the EMF, waste transfer lines, and added utilities needed to operate the EMF.

A quarterly update will be provided to DOE clearly showing those schedule items that are actualized as being complete. This will enable an incremental review/walkdown to be executed to verify completion.

DOE shall provide concurrence regarding completion of the Physical Plant complete milestone or provide notice of material deficiencies within thirty (30) working days of receipt of declaration of completion. In the event DOE provides notice of material deficiencies after thirty (30) working days, the Contractor shall be granted day for day relief to the schedule decrement outlined in Section B, "Supplies or Services and Prices/Costs," Attachment B-2-E, "Incentive Fee E - LBL Physical Plant Complete Performance Based Incentive Fee."

Activity ID	Description
4LL0000999	LBL Physical Plant Complete

Interim Milestone B-1 Commission LBL in the DFLAW Configuration Performance Based Incentive Fee

Facility	Activity ID	Description
LAW	7KLK2A1626	ORP (SER) Approval of LAW DSA

Milestone Definition

Prepare and issue the LAW DSA and associated technical safety requirements (TSR). Submit the documents to DOE and receive a SER from DOE approving the DSA and TSRs, with conditions of approval as warranted, and directing implementation of the documents.

Predecessors to completion of the LAW DSA, which must be complete include the following:

- The LAW PDSA change package (CP) with updates to the control selection consistent with DOE-STD-3009-1994, CN3 and compliant with 15-NSD-0017, "Contract No. DE-AC27-01RV14136 – Updated Safety Analysis Direction"
- A DOE approved Unreviewed Safety Question procedure.

Inclusions

N/A

Exclusions

N/A

Objective Evidence of Milestone Completion and Key Predecessors

This milestone shall be considered complete upon transmission by DOE of a SER which approves the LAW DSA and associated TSRs, including conditions of approval as warranted. The LAW DSA shall be a complete standalone DSA to support DFLAW operations. The LAW DSA shall consist of a 17 chapter DSA which complies with DOE-STD-3009-94 CN3.

Described above.

Activity ID	Description	Date
	General Volume DSA	
7KLK2A1626	ORP (SER) Approval of LAW DSA	15-Aug-18

Interim Milestone B-2, Commission LBL in the DFLAW Configuration Performance Based Incentive Fee

Facility	Activity ID	Description
LAB	5HTC107610	LAB Startup Testing Complete

Milestone Definition

Component and system testing within the scoped system boundaries of the LAB facility, as needed to support DFLAW, is complete and the LAB systems have been accepted by plant operations.

Systems that will be tested to achieve LAB startup testing complete include only those LAB systems to operate in the DFLAW configuration. Any LAB systems not needed to support DFLAW operations shall be excluded. Systems within the LAB requiring testing are as follows:

FPW-A-01 NM	Fire Protection Water System
FDE-A-01 NM	Fire Detection and Alarm System
MVE-A-01 NM	Medium Voltage Electrical System
DOW-A-01 NM	Domestic (potable) Water System
LVE-A-01 NM	Low Voltage Electrical System
SND-A-01 NM	Sanitary Disposal System
LTE-A-01 NM	Lighting Electrical System
PCJ2 NM	Process Control system
UPE-A-01 NM	Uninteruptible Power Electrical System
SCW-A-01 NM	Steam Condensate Water System
MXG-A-01 NM	Miscellaneous Gases System
CHW-A-01 NM	Chilled Water System
PSA-A-01 NM	Plant Service Air System
RLD-A-01 NM	Radioactive Liquid Waste Disposal System
ASX-A-01 NM	Autosampling System
LPS-A-01 NM	Low Pressure Steam System
DIW-A-01 NM	Demineralized Water System
ASJ-A-01 NM	Autosampling Control System
PVA-A-01 NM	Plant Vacuum Air System
BAG-A-01 NM	Bottled Argon Gas System
BHG-A-01 NM	Bottled Helium Gas System
C1V-A-01 NM	C1 Ventilation System
BNG-A-01 NM	Bottled Nitrogen Gas System
C3V-A-01 NM	C3 Ventilation System
C2V-A-01 NM	C2 Ventilation System
CME	Communications Electrical System

If BNI determines that one or more of the listed systems are not required, notification and justification will be provided to DOE for review and concurrence.

Inclusions

All systems necessary to operate the LAB in support of DFLAW operations.

Exclusions

- All systems and components not required for DFLAW operations
- B Punch List items accepted by plant operations acceptance of the systems.

Objective Evidence of Milestone Completion and Key Predecessors

This milestone shall be considered complete upon completion of individual system and component testing and turnover, and acceptance of all systems necessary for DFLAW operation to commissioning and operations in accordance with procedure 24590-WTP-GPP-MGT-042 (as amended). Compliance with procedure 24590-WTP-GPP-MGT-042 will be demonstrated through delivery of Contractor certification and reference to complete turnover records. DOE oversight will validate the Contractor's assessment.

DOE shall provide concurrence regarding the acceptability of the submission or provide notice of material deficiencies within thirty (30) calendar days of receipt. In the event DOE provides notice of material deficiencies after thirty (30) calendar days, the Contractor shall be granted day for day relief to the schedule decrement outlined in Section B, Table B-2-F.

Startup component and system testing includes all work defined through completion of the following activities:

Activity ID	Activity Name
5HTC107700	LAB - SU Component & System Testing - FPW-A-01 NM
5HTC107680	LAB - SU Component & System Testing - FDE-A-01 NM
5HTC107970	LAB - SU Component & System Testing - MVE-A-01 NM
5HTC107660	LAB - SU Component & System Testing - DOW-A-01 NM
5HTC107760	LAB - SU Component & System Testing - LVE-A-01 NM
5HTC108010	LAB - SU Component & System Testing - SND-A-01 NM
5HTC107740	LAB - SU Component & System Testing - LTE-A-01 NM
5HTC107800	LAB - SU Component & System Testing - PCJ2 NM
5HTC107920	LAB - SU Component & System Testing - UPE-A-01 NM
5HTC107880	LAB - SU Component & System Testing - SCW-A-01 NM
5HTC107780	LAB - SU Component & System Testing - MXG-A-01 NM
5HTC107600	LAB - SU Component & System Testing - CHW-A-01 NM
5HTC107820	LAB - SU Component & System Testing - PSA-A-01 NM
5HTC107860	LAB - SU Component & System Testing - RLD-A-01 NM
5HTC107420	LAB - SU Component & System Testing - ASX-A-01 NM
5HTC107720	LAB - SU Component & System Testing - LPS-A-01 NM
5HTC107640	LAB - SU Component & System Testing - DIW-A-01 NM
5HTC108190	LAB - SU Component & System Testing - ASJ-A-01 NM
5HTC107840	LAB - SU Component & System Testing - PVA-A-01 NM
5HTC107440	LAB - SU Component & System Testing - BAG-A-01 NM
5HTC107460	LAB - SU Component & System Testing - BHG-A-01 NM
5HTC107520	LAB - SU Component & System Testing - C1V-A-01 NM
5HTC107480	LAB - SU Component & System Testing - BNG-A-01 NM
5HTC107560	LAB - SU Component & System Testing - C3V-A-01 NM

Activity ID	Activity Name
5HTC107540	LAB - SU Component & System Testing - C2V-A-01 NM
4TT56230	LAB - Construction Turnover to Startup - Communications Electrical System CME
5HTC107610	LAB - SU Component & System Testing Complete

Interim Milestone B-3, Commission LBL in the DFLAW Configuration Performance Based Incentive Fee

Facility	Activity ID	Description
LAW	5HLC107600	LAW Startup Testing Complete

Milestone Definition

Component and system testing within the scoped system boundaries of the LAW Facility systems are complete and LAW systems have been accepted by plant operations.

Systems within LAW requiring testing are as follows:

GRE	Grounding & Lightning Protection Electric System
SND	Sanitary Disposal System
DCE	DC Electrical System
FPW	Fire Protection Water System
MVE	Medium Voltage Electrical System
NLD	Non-radioactive Liquid Waste Disposal System
ASJ	Autosampling Control System
FNJ	Facility Network Infrastructure System
MHJ	Mechanical Handling Control System
PCJ	Process Control system
THE	Heat Trace Electrical System
C1V	C1 Ventilation System
LVE	Low Voltage Electrical System
PPJ	Programmable Protection system
LTE	Lighting Electrical System
PSA	Plant Service Air System
ISA	Instrument Air System
PSW	Process Service Water System
DOW	Domestic (potable) Water System
HPS	High Pressure Steam System
FDE	Fire Detection and Alarm System
UPE	Uninteruptible Power Electrical System
LPS	Low Pressure Steam System
DIW	Demineralized Water System
SCW	Steam Condensate Water System
CHW	Chilled Water System
ARV	Atmospheric Reference Ventilation System
CDG	Carbon Dioxide Gas System
AMR	Ammonia Reagent System
C5V	C5 Ventilation System
ASX	Autosampling System
LFH1	LAW Container Finishing Handline System Melter #1

C3V	C3 Ventilation System
LMH	LAW Melter Handling System
MXG	Miscellaneous Gases System
LFH2	LAW Container Finishing Handline System Melter #2
SHR	Sodium Hydroxide Reagent System
LSH	LAW Melter Equipment Support Handling System
RLD	Radioactive Liquid Waste Disposal System
LRH	LAW Container Receipt Handling System
PTJ	Process & Mechanical Handling CCTV System
CME	Communications Electrical System
C2V	C2 Ventilation System
LCP1	Concentrate Receipt Process System 1
RWH	Radioactive Solid Waste Handling System
LCP2	Concentrate Receipt Process System 2
LVP	LAW Secondary Offgas/Vessel Vent Process System
LEH	LAW Container Export Handling System
PCW	Plant Cooling Water System
SDJ	Stack Discharge Monitoring system
LFP1	Melter Feed Process System 1
LMP1	Melter Process System 1
LOP1	Primary Offgas Process System 1
LPH	LAW Container Pour Handling Process
RPJ	Radiological Personnel Monitoring System
CPE	Cathodic Protection Electrical System
EMJ	Environmental Monitoring System
LFP2	Melter Feed Process System 2
LOP2	Primary Offgas Process System 2
LMP2	Melter Process System 2
GFR	Glass Formers Reagent System
BSA	Breathing Service Air System
SCE	Security Electrical System

If BNI determines that one or more of the listed systems are not required, notification and justification will be provided to DOE for review and concurrence.

Inclusions

• All systems necessary to operate LAW in support of DFLAW operations.

Exclusions

- All systems and components not required for DFLAW operations
- B Punch List items accepted by Plant Ops acceptance of the systems.

Objective Evidence of Milestone Completion and Key Predecessors

This milestone shall be considered complete upon completion of individual system and component testing and turnover, and acceptance of all systems necessary for DFLAW operation to Commissioning and Operations in accordance with procedure 24590-WTP-GPP-MGT-042 (as amended). Compliance with procedure GPP-MGT-042 will be demonstrated through delivery of Contractor certification and reference to complete turnover records. DOE oversight will validate the contractor's assessment.

DOE shall provide concurrence regarding the acceptability of the submission or provide notice of material deficiencies within thirty (30) calendar days of receipt. In the event DOE provides notice of material deficiencies after thirty (30) calendar days, the Contractor shall be granted day for day relief to the schedule decrement outlined in Section B, Table B-2-F.

Startup component and system testing includes all work defined through completion of the following activities:

Activity ID	Activity Name
5HLC106580	LAW - SU Component & System Testing - GRE
5HLC107380	LAW - SU Component & System Testing - SND
5HLC106420	LAW - SU Component & System Testing - DCE
5HLC106540	LAW - SU Component & System Testing - FPW
5HLC107060	LAW - SU Component & System Testing - MVE
5HLC107100	LAW - SU Component & System Testing - NLD
5HLC106200	LAW - SU Component & System Testing - ASJ
5HLC106520	LAW - SU Component & System Testing - FNJ
5HLC107040	LAW - SU Component & System Testing - MHJ
5HLC107120	LAW - SU Component & System Testing - PCJ
5HLC106620	LAW - SU Component & System Testing - HTE
5HLC106260	LAW - SU Component & System Testing - C1V
5HLC107000	LAW - SU Component & System Testing - LVE
5HLC107160	LAW - SU Component & System Testing - PPJ
5HLC106980	LAW - SU Component & System Testing - LTE
5HLC107180	LAW - SU Component & System Testing - PSA
5HLC106640	LAW - SU Component & System Testing - ISA
5HLC107200	LAW - SU Component & System Testing - PSW
5HLC106460	LAW - SU Component & System Testing - DOW
5HLC106600	LAW - SU Component & System Testing - HPS
5HLC106500	LAW - SU Component & System Testing - FDE
5HLC107400	LAW - SU Component & System Testing - UPE
5HLC106920	LAW - SU Component & System Testing - LPS
5HLC106440	LAW - SU Component & System Testing - DIW
5HLC107320	LAW - SU Component & System Testing - SCW
5HLC106360	LAW - SU Component & System Testing - CHW
5HLC106180	LAW - SU Component & System Testing - ARV
5HLC106340	LAW - SU Component & System Testing - CDG
5HLC106160	LAW - SU Component & System Testing - AMR
5HLC106320	LAW - SU Component & System Testing - C5V
5HLC106220	LAW - SU Component & System Testing - ASX
5HLC106720	LAW - SU Component & System Testing - LFH1

Activity ID	Activity Name
5HLC106300	LAW - SU Component & System Testing - C3V
5HLC106800	LAW - SU Component & System Testing - LMH
5HLC107080	LAW - SU Component & System Testing - MXG
5HLC106740	LAW - SU Component & System Testing - LFH2
5HLC107360	LAW - SU Component & System Testing - SHR
5HLC106960	LAW - SU Component & System Testing - LSH
5HLC107240	LAW - SU Component & System Testing - RLD
5HLC106940	LAW - SU Component & System Testing - LRH
5HLC107220	LAW - SU Component & System Testing - PTJ
5HLC106380	LAW - SU Component & System Testing - CME
5HLC106280	LAW - SU Component & System Testing - C2V
5HLC106660	LAW - SU Component & System Testing - LCP1
5HLC107280	LAW - SU Component & System Testing - RWH
5HLC106680	LAW - SU Component & System Testing - LCP2
5HLC107020	LAW - SU Component & System Testing - LVP
5HLC106700	LAW - SU Component & System Testing - LEH
5HLC107140	LAW - SU Component & System Testing - PCW
5HLC107340	LAW - SU Component & System Testing - SDJ
5HLC106760	LAW - SU Component & System Testing - LFP1
5HLC106820	LAW - SU Component & System Testing - LMP1
5HLC106860	LAW - SU Component & System Testing - LOP1
5HLC106900	LAW - SU Component & System Testing - LPH
5HLC107260	LAW - SU Component & System Testing - RPJ
5HLC106400	LAW - SU Component & System Testing - CPE
5HLC106480	LAW - SU Component & System Testing - EMJ
5HLC106780	LAW - SU Component & System Testing - LFP2
5HLC106880	LAW - SU Component & System Testing - LOP2
5HLC106840	LAW - SU Component & System Testing - LMP2
5HLC106560	LAW - SU Component & System Testing - GFR
5HLC106240	LAW - SU Component & System Testing - BSA
5HLC107300	LAW - SU Component & System Testing - SCE
5HLC107600	LAW - SU Component & System Testing Complete

Interim Milestone B-4, Commission LBL in the DFLAW Configuration Performance Based Incentive Fee

Facility	Activity ID	Description
EMF	5HBDFL8530	EMF Startup Testing Complete

Milestone Definition

Component and system testing within the scoped system boundaries of the Effluent Management Facility (EMF) is complete and the EMF systems have been accepted by plant operations.

Systems that will be tested to demonstrate EMF startup testing complete include the following:

GRE	Grounding & Lightning Protection Electric System
FPW	Fire Protection Water System
CME	Communications Electrical System
HTE	Heat Trace Electrical System
LTE	Lighting Electrical System
FDE	Fire Detection and Alarm System
ISA	Instrument Air System
DOW	Domestic (potable) Water System
HPS	High Pressure Steam System
LPS	Low Pressure Steam System
DIW	Demineralized Water System
AFR	Anti-foam Reagent System
DEP	DFLAW EMF Process System

BNI will also demonstrate Initial EMF Evaporator Testing with Water (Activity ID 5HLC3JA1936F). Completionwill be demonstrated by work package closure and issuance.

If BNI determines that one or more of the listed systems are not required, notification and justification will be provided to DOE for review and concurrence.

Inclusions

N/A

Exclusions

B Punch List items accepted by plant operations acceptance of the system.

Objective Evidence of Milestone Completion and Key Predecessors

This milestone shall be considered complete upon completion of individual system and component testing and turnover, and acceptance of all systems necessary for DFLAW operation to Commissioning and Operations in accordance with procedure 24590-WTP-GPP-MGT-042 (as amended). Compliance with procedure 24590-WTP-GPP-MGT-042 will be demonstrated through delivery of Contractor certification and reference to complete turnover records. DOE oversight will validate the contractor's assessment.

DOE shall provide concurrence regarding the acceptability of the submission or provide notice of material deficiencies within thirty (30) calendar days of receipt. In the event DOE provides notice of material

deficiencies after thirty (30) calendar days, the Contractor shall be granted day for day relief to the schedule decrement outlined in Section B, Table B-2-F.

Startup component and system testing includes all work defined through completion of the following activities:

Activity ID	Activity Name
5HBDFL7950	BOF - SU - EMF - Component & System Testing (FNM) - GRE
5HBDFL8190	BOF - SU - EMF - Component & System Testing (FNM) - FPW
5HBDFL7910	BOF - SU - EMF - Component & System Testing (FNM) - CME
5HBDFL7970	BOF - SU - EMF - Component & System Testing (FNM) - HTE
5HBDFL7990	BOF - SU - EMF - Component & System Testing (FNM) - LTE
5HBDFL8090	BOF - SU - EMF - Component & System Testing (FNM) - FDE
5HBDFL7630	BOF - SU - EMF - Component & System Testing (FNM) - ISA
5HBDFL7690	BOF - SU - EMF - Component & System Testing (FNM) - DOW
5HBDFL7530	BOF - SU - EMF - Component & System Testing (FNM) - HPS
5HBDFL7550	BOF - SU - EMF - Component & System Testing (FNM) - LPS
5HBDFL7670	BOF - SU - EMF - Component & System Testing (FNM) - DIW
5HBDFL7710	BOF - SU - EMF - Component & System Testing (FNM) - AFR
5HBDFL7730	BOF - SU - EMF - Component & System Testing (FNM) - DEP
5HBDFL8530	BOF - SU - EMF - Component & System Testing (FNM)

Interim Milestone B-5, Commission LBL in the DFLAW Configuration Performance Based Incentive Fee

Facility	Activity ID	Description	
LAB	5HTC3JA00410	LAB Readiness to Operate	

Milestone Definition

Complete activities necessary to demonstrate readiness to operate of the Analytical Laboratory (LAB) by completing the closure of all pre-start findings from the Contractor Ready to Operate Assessment of the LAB facility. Additional activities to be completed include the following as needed to support the Contractor Ready to Operate Assessment of the LAB facility as needed for DFLAW:

- Complete LAB-Ops-Conduct Chemical Management Assessment
- Complete LAB-Ops-Conduct Onsite Methods Validation Sealed Sources

Inclusions

N/A

Exclusions

Post-start findings.

Objective Evidence of Milestone Completion and Key Predecessors

Documentation of closure of all pre-start findings from the Contractor Ready to Operate Assessment through the Contractor's Corrective Action Management Program system. DOE oversight will validate the contractor's assessment.

DOE shall provide concurrence regarding the acceptability of the submission of the Contractor's Declaration of Readiness to operate the LAB or provide notice of material deficiencies within thirty (30) calendar days of receipt. In the event DOE provides notice of material deficiencies after thirty (30) calendar days, the Contractor shall be granted day for day relief to the schedule decrement outlined in Section B, Table B-2-F.

Activity ID	Activity Name
5HTC3JA0039	LAB-Ops-Conduct Chemical Management Assessment
5HTC3JA0040	LAB-Ops-Conduct Onsite Methods Validation Sealed Sources

Interim Milestone B-6 Commission LBL in the DFLAW Configuration Performance Based Incentive Fee

Facility	Activity ID	Description
LAW	5HLC3JA00371	LAW DOE Headquarters ORR complete

Milestone Definition

Completion of the DOE Operational Readiness Review (ORR) and issuance of the DOE ORR Action Closure report, including closure of all pre-start findings, Activity ID 5HLC3JA00371 and receipt of approval from the startup authorization authority.

Key supporting activities that will be completed prior to the commencement of the DOE ORR, include:

- Pre-cold commissioning management assessment.
- The LAW Vitrification Facility shall be operated continuously for two (2) five (5)-day cold commissioning tests. If subsequent five (5)-day test(s) are required, the timing of the test(s) shall be agreed upon by both the DOE and the Contractor.
- LAW environmental performance test.
- Contractor ORR and closure of pre-start findings.

Inclusions

- Scope, breadth, and depth of ORR will be defined in the approved Startup Notification Report and the ORR plan of action
- Reference B.11 (d)(1) Fee Risk Allocation, Regulatory Actions.

Exclusions

N/A

Objective Evidence of Milestone Completion and Key Predecessors

Receipt of permission to commence hot commissioning from the DOE Authorization Authority.

Interim Milestone B-7, Commission LBL in the DFLAW Configuration Performance Based Incentive Fee (508)

Facility	Activity ID	Description
LAW	5HLPRDC410	Declare Readiness to Receive Anhydrous Ammonia

Milestone Definition

Declare Readiness to Receive Anhydrous Ammonia into the Building 23 AAH systems.

Inclusions

N/A

Exclusions

N/A

Objective Evidence of Milestone Completion and Key Predecessors

Deliverable – The declaration will state the results of management assessment (PSSR) which evaluates the readiness of facilities and personnel to safely manage the hazards. The assessment shall be based on the requirements of 10CFR1910.119. The declaration will follow closure of any pre-starts and will also document the acceptable implementation of the applicable CSMP controls, including any controls needed to prevent the introduction of Ammonia into the LAW facility. The declaration would allow only ammonia receipt and storage in the Building 23 AAH system (aka Ammonia skid). Introduction of Ammonia to the LAW facility would be covered later and accomplished closer to the need to use Ammonia in the LAW.

Key Predecessors

Activity ID	Description	
5HLPRDC4460	LAW - RA - [CSMP] Conduct PSSR (Ammonia Controls)	
5HLPRDC4470	LAW-RA-[CSMP] Close PSSR Pre Start Findings and Issue Report	

 SECTION J – LIST OF ATTACHMENTS, ATTACHMENT P, COMPLETION DEFINITION SHEETS FOR INCENTIVE FEES, is also revised to update the numbering of the Milestone Successful Demonstration of Hot Commissioning Performance Based Incentive to B-8.

Milestone B-8 Milestone Successful Demonstration of Hot Commissioning Performance Based Incentive

Facility	Activity ID	Description
DFLAW	5HLC3JA00401	Successful Demonstration of Hot Commissioning

Milestone

Milestone B-8 Milestone Successful Demonstration of Hot Commissioning Performance Based Incentive (508)

Facility	Activity ID	Description
DFLAW	5HLC3JA00401	Successful Demonstration of Hot Commissioning

Milestone Definition

Successful demonstration of LAW Vitrification Facility hot commissioning milestone shall be considered accomplished when Contract Deliverable 5.15, "Certification of Demonstration of Hot Commissioning," is approved by DOE.

Additional support activities that will be completed prior to the submittal of the certification of hot commissioning include:

- Completion of cold commissioning testing;
- Completion of transfer line tie-in between WTP and Tank Farm Operator;
- Tank Farm Operator completes first batch;
- Completion of waste acceptance for first batch of tank waste;
- Submission of an engineering evaluation establishing the number of ILAW containers required to displace nonradioactive simulants with LAW pretreatment system feed in ILAW product glass; and
- Produce compliant ILAW product as follows:
 - Exceeds minimum waste loading as defined in the Contract for the DFLAW waste stream in accordance with Section C(8), Specification 2
 - Demonstrates conformance with ICD 15.

Inclusions

N/A

Exclusions

N/A

Objective Evidence of Milestone Completion and Key Predecessors

Deliverable – A Certification of successful demonstration of Hot Commissioning has been approved by DOE.

DOE shall provide approval of the submission or provide notice of material deficiencies within thirty (30) calendar days of receipt. In the event DOE provides notice of material deficiencies after thirty (30) calendar days, the Contractor shall be granted day for day relief to the schedule decrement outlined in Section B, Table B-2-F.

Objective Evidence of Milestone Completion and Key Predecessors

Activity ID	Description
5HLC3JA00340	Cold Commissioning Testing Complete
5HLC3JA00380	Transfer line Tie-in
5HLC3JA00382	TOC First Batch
5HLC3JA00390	LAW Hot Commissioning
5HLC3JA00400	Prepare and Submit Certification of Hot Commissioning Completion

SECTION J – LIST OF ATTACHMENTS ATTACHMENT Q DFLAW DESIGN COMPLETION CRITERIA INCENTIVE DEFINITIONS

The DFLAW design effort in CLIN 2.1 consists of several fee incentives as outlined in Section B.5. This attachment contains the completion criteria for these fee incentives.

DFLAW Design Completion Cost Incentive Fee

The DFLAW Design Completion Incentive Fee consists of two components. A Schedule Incentive Fee, which can adjust the final Cost Incentive Fee calculation positively for early completion or negatively for late completion and a Cost Incentive Fee, which is determined at the completion of the effort as defined herein.

The schedule completion incentive/disincentive fee of this milestone is calculated by the completion of the Section 1 Major Scope Elements established in the Milestone Definition Sheet (DF-01). The target schedule completion is April 30, 2018. Calculation of any Cost Incentive Fee adjustments associated with the schedule performance shall be based on this target date. See Section B, Attachment B-2-H, Table B-2-H-1 CLIN 2.1 DFLAW Design Completion Fee for the Schedule Incentive Fee details.

Cost performance for DFLAW Design Completion will be measured by the cumulative costs associated with the performance of the Major Scope Elements and the Residual Scope Elements established in the Milestone Definition sheet for DFLAW Design Completion. The Cost Incentive Fee shall be determined once the combined scope elements have been completed and a "Declaration of Completion" package has been prepared by the Contractor and approved by DOE as outlined in Section B, Attachment B-2-H. Evidence of completion of the activities defined in the Milestone Definition Sheet (DF-01) shall be provided for verification.

DFLAW Interim Milestone Completion

The DFLAW Interim Milestone Completion Incentive Fee consists of two distinct components. These components are "EMF Hazard Analysis and 30% Design Review" (DF-02) and "DFLAW Safety Basis Change Package" (DF-03) and are defined in the Interim Milestone definition sheets contained herein. The Contractor shall prepare and submit a Declaration of Completion to DOE for determination of the final fee paid for these Interim Milestones as outlined in Section B, Attachment B-2-H. The fee for these Interim Milestones will be earned and payable when the Contracting Officer determines the milestone has been completed as described in the milestone definition sheets DF-02 and DF-03 contained in this Attachment Q.

DF-01, Cost Incentive Milestone Definition Sheet

WTP Contract No. DE-AC27-01RV14136

Facility	Activity ID	Description
DFLAW		CLIN 2.1 DFLAW Design Completion

Milestone Definition

Completion of major design activities contained in Section 1 progesses the major design elements to a committed status that supports a bid for procurement and construction of the DFLAW project, and constitutes completion of the schedule incentive/disincentive portion of the DFLAW Design Completion fee. Completion of the Residual Scope Elements in Section 2, and Section 3 defines objective evidence for completion of CLIN 2.1 design for the purposes of calculating the Cost Incentive Fee as set forth in Section B-2-H.

Section 1: Major Design Elements

- System Design Description/Facility Design Description
- Final Process Flow Diagrams
- Heat and Material Balance
- Major Equipment Lists
- Instrumentation Specifications
- Major System Calculations
- Major System Specifications and Data sheets
- Piping and instrumentation diagrams (P&ID)/Line and valve lists
- Ventilation and instrumentation diagrams and lists
- Plant layout design detailed planning (3D model)
- Detailed Piping Design
- Stress and Support design
- Architectural Design Renderings, Layouts, details and schedules
- Structural/Foundation Design Concrete
- Structural/Foundation Design Steel
- · Civil Design drainage, grading, paving underground
- Radiation Safety Design Criteria
- Fire Analysis

Section 2: Residual Scope Elements

- Arc Flash Calculations
- Final Termination Schedules
- Software Requirements
- Final Instrument Index
- Functional Acceptance Testing (Operations and Engineering Testing)
- Develop ICN Simulator Software for LAW/EMF
- Final Public Reviews/Permitting operating and final installation permit for DWP equipment in EMF (evaporator and tanks)
- Management of Acquired Software. IT-14 is the old procedure for software quality and putting software on the baseline, this procedure will be replaced with a new engineering procedure.

Section 3: Objective Evidence of Milestone Completion and DFLAW Activity ID Key Predecessors

Completion of this milestone shall be measured by submittal of a "Declaration of Completion" (DOC) package by BNI. Separate DOC packages shall be submitted for the Schedule and Cost components of this milestone supported by evidence of completion. The Schedule DOC package shall include evidence of completion of the Major Design Elements defined in Section 1. The DOC package for the cost component of this milestone shall include evidence of completion of Scope elements defined in Sections 1 and 2 to a confirmed status. The Cost DOC submittal shall include the following elements of work:

- Engineering report for DFLAW scope with confirmed calculations and drawings.
- · Confirmed specifications and datasheets,
- Initial issuance of the preliminary fire hazard analysis.

The following list of Key Predecessors will be completed:

Activity ID	Description	Activity ID	Description
3ED90BODCN	EMF - E1 - BODCN Completion	3ED900011	EMF - E1 - Perform 30% Review
3ED900025	EMF - E1 - DFLAW - ICD 30		
3ED900026	EMF - E1 - DFLAW - ICD 31	3ED4800008	EMF - EN - Issue Water DIW / DOW / PCW/PSW P&IDs & Lists - Rev 0
3ED900027	EMF - E1 - DFLAW - ICD 6	3ED4800009	EMF - EN - Issue Air BSA/ISA/ PSA P&IDs & Lists - Rev 0
3ED4800004	EMF - EN - Issue Drains / Vents / Interfaces P&IDs & Lists - Rev 0	3ED4800006	EMF - EN - Issue Steam LPS / HPS / SCW P&IDs & Lists - Rev 0
3ED4800014	EMF - EN - Issue Evaporator P&IDs & Lists - Rev 0	3ED2700017	EMF - EH - Issue Fire Protection P&ID (1) - Rev 0
3ED4800017	EMF - EN - Issue Major Water DIW / DOW / PCW / PSW Equipment Datasheets - Rev 0	3ED4800118	EMF - EN - Issue Major Air BSA/ISA/PSA Equipment Datasheets - Rev. 0
3ED4800114	EMF - EN - Issue Evaporator Equipment Datasheets - Rev. 0	3ED4800115	EMF - EN - Issue Major Drains/Vents/Interfaces Equipment Datasheets Rev. 0
3ED4800116	EMF-EN-Issue Major Equipment Datasheets to Support Permitting –Rev. 0	3ED1700108	EMF - EJ - Develop and Issue HVAC and Fire Protection Instruments Data Sheets Rev. 0
3ED1700069	EMF - EJ - Develop and Issue Steam LPS/HPS/SCW Instruments Data Sheets Rev. 0	3ED1700042	EMF - EJ - Develop and Issue Water DIW/DOW/PCW/PSW Instruments Data Sheets Rev. 0
3ED1700086	EMF - EJ - Develop and Issue Air BSA/ISA/PSA Instruments Data Sheets Rev. 0	3ED1700081	EMF - EJ - Develop and Issue Evaporator Instruments Data Sheets Rev. 0
3ED1700098	EMF - EJ - Develop and Issue Drains Instruments Data Sheets Rev. 0	3ED1700042	EMF - EJ - Develop and Issue Water DIW/DOW/PCW/PSW Instruments Data Sheets Rev. 0
3ED4800118	EMF - EN - Issue Major Air BSA/ISA/PSA Equipment Datasheets - Rev. 0	3ED4800115	EMF - EN - Issue Major Drains/Vents/Interfaces Equipment Datasheets Rev. 0
3ED4800116	EMF - EN - Issue Major Equipment Datasheets to Support Permitting - Rev. 0	3ED4800114	EMF - EN - Issue Evaporator Equipment Datasheets - Rev. 0

Activity ID	Description	Activity ID	Description
3ED1700069	EMF - EJ - Develop and Issue	3ED1700086	EMF - EJ - Develop and Issue Air
	Steam LPS/HPS/SCW		BSA/ISA/PSA Instruments Data
	Instruments Data Sheets Rev. 0		Sheets Rev. 0

DF-02, Interim Milestone Definition Sheet

WTP Contract No. DE-AC27-01RV14136

Facility	Activity ID	Description
EMF	3ED900011	EMF Hazard Analysis and 30% Design Review

Milestone Definition

Thirty percent (30%) Design Review will use the process as defined in procedure 24590-WTP-GPG-ENG-050 (3D Model Review/Freeze). A design review plan will be prepared, submitted, and approved at least five (5) working days prior to conducting the review. This plan will include objectives, scope of review, documents to be reviewed, method(s) for conducting the review, and methods to resolve any identified issues. The expectation of the process is to finalize and approve (freeze) the design and 3D model, and ensure inter-discipline/functional coordination.

Model review participants are across all functions and disciplines and include the following:

- Engineering Design Agency (as a minimum this includes, civil/structural/architectural [CSA];
 electrical; control and instrumentation [C&I]; mechanical; HVAC; fire protection; plant design)
- Engineering Design Authority (as a minimum this includes, Nuclear Safety, System Engineering, and Process Engineering)
- Nuclear Safety
- Environmental
- Industrial Hygiene
- Operations
- Plant Engineering
- Procurement
- Construction
- DOE.

Model review participants are expected to provide constructive input on the design of the commodities being reviewed relative to the following:

- Safety
- Quality
- Operability
- Maintainability
- Constructability
- Human factors
- Permitting requirements
- As Low As Reasonably Achievable (ALARA) principles.

The following related activities will be fundamentally complete before a thirty percent (30%) Design Reviews is commenced:

- BOD requirements are defined
- Hazards to system operation have been preliminarily identified and mitigation strategies defined
- Major equipment and systems are identified.

Requirements

- Preliminary System Design Description, Part 1 (not issued)
- Preliminary Facility Design Description (not issued).

Basis of Design

- System Requirements Document
- Design Criteria
- Code of Record
- Scope of Facilities
- Operations and Maintenance Requirements.

Nuclear Safety

Preliminary hazard analysis, accident analysis, and control selection

Technical Issues - Identified

- Preliminary Functional Requirements
- Preliminary TSRs
- Preliminary Radiation Zone Maps
- Preliminary Shielding Criteria.

Process Engineering

Establish BOD and identify applicable codes and standards

- Process Analysis Model > ninety (90) percent
- Waste streams identified
- Input Basis of Design > ninety (90) percent
- Revision A Process Flow Diagrams
- Revision A Mass Balance.

Mechanical Systems, including Mechanical Handling and Fire Protection

Establish basis for design and identify applicable codes and standards

- Preliminary Calculations
- Preliminary P&IDs
- Preliminary System Flow Diagrams
- Preliminary Mechanical Line, Valve & Equipment Lists
- Preliminary Mechanical Handling Drawings
- Preliminary Mechanical Sequence Drawings
- Preliminary MR/Spec/Datasheets for Long Lead Procurements.

HVAC

Establish basis for design and identify applicable codes and standards

- Preliminary Calculations
- Preliminary Ventilation Flow Diagrams
- · Preliminary ventilation and instrumentation diagrams
- Preliminary Heating/Cooling Loads
- Preliminary Equipment List
- Preliminary Duct Routing (major runs)

- Preliminary Material Requisition/Specification/Datasheets for Long Lead Procurements
- Preliminary Electrical Power (Equipment Loads & Duty)
- Preliminary Heat Generated by Equipment
- Preliminary Air Flow/Cooling Needs for Equip
- Preliminary Compressed Air/Gases.

<u>CSA</u>

Establish basis for design and identify applicable codes and standards

- Preliminary Structural Model Complete
- Preliminary Structure Framing Plans/Sections
- Preliminary Concrete drawings
- Preliminary Calculations
- Preliminary Plot Plan
- Preliminary Drainage Plan
- Preliminary Plans, Sections, Elevations
- Preliminary Architectural Details
- Preliminary Architectural Schedules.

Plant Design

- Major Commodities thirty (30) percent of Budget Quantities In the Model
- Major Process and HVAC Equipment Modelled
- Space Allocation Plan Implemented
- Preliminary General Arrangement Drawings
- Preliminary Building Plumbing and Drains
- Preliminary HVAC Orthographic Drawings
- Preliminary Piping Specifications
- Preliminary Piping Class Sheets.

Electrical

Establish basis for design and identify codes and standards

- Preliminary Calculations
- Preliminary One-Line Diagram
- Preliminary Electrical Load Summary
- Preliminary Power Distribution System Layout (Load Centers, Switchgear, MCCs, Panel Boards)
- Preliminary MR/Spec/Datasheets for Long Lead Procurements.

Controls and Instrumentation

Establish basis for design and identify applicable codes and standards

- Preliminary Calculations
- Preliminary Control Strategy
- Preliminary Control Requirements (manual, semi, automatic)
- Preliminary Communication protocol
- Preliminary Security, data storage, retrieval and security
- Reliability, Availability, Maintainability (RAM) parameters identified for key systems
- Preliminary MR/Spec/Datasheets for Long Lead Procurements.

Other

- Issued for use Interface Control Documents (ICD)
- Preliminary Material Assignment Schedule (MAS).

Inclusions

N/A

Exclusions

N/A

Objective Evidence of Milestone Completion and DFLAW Activity ID Key Predecessors:

Objective Evidence

The thirty (30) percent design review will be documented by issuing an engineering report containing the associated EMF hazard analysis. The report will describe the status of the design; address each design, safety basis, and operating and maintenance requirement including design and safety margins and capability to comply with WTP Contract technical and quality requirements. The report shall resolve issues identified by DOE and the Contractor staff during the review. The report will identify open issues and unverified assumptions requiring closure as design matures. These actions and items that are not incorporated will be tracked in an action tracking system. This interim milestone will be considered complete upon submission by the Contractor to DOE, subject to concurrence by DOE within ten (10) days of receipt.

Key Predecessors

Activity ID	Description	Activity ID	Description
3ED900025	EMF - E1 - DFLAW - ICD 30	3ED4700003	EMF – EB – Develop Process Flow Diagrams - Committed
3ED900026	EMF - E1 - DFLAW - ICD 31	3ED1000005	EMF – E2 – Prepare BODCN
3ED900027	EMF - E1 - DFLAW - ICD 6	3ED4700001	EMF – EB – Develop Process Committed Calculations – Equipment Design
3ED4800004	EMF - EN - Issue Drains / Vents / Interfaces P&IDs & Lists - Rev 0	7KLDFL327	DFLAW Hazard Analysis

DF-03 Interim Milestone Definition Sheet

WTP Contract No. DE-AC27-01RV14136

Facility	Activity ID	Description
EMF		DFLAW Safety Basis Change Package (PDSA)

Milestone Definition

Prepare and issue the DFLAW EMF Safety Basis Change Package (SBCP)/PDSA update as an addendum to the LAW PDSA. Submit the SBCP/PDSA to DOE.

Inclusions

N/A

Exclusions

N/A

Objective Evidence of Milestone Completion and Key Predecessors

This milestone shall be considered complete upon the submission of the SBCP/PDSA to DOE. DOE shall provide concurrence regarding the acceptability of the submission or provide notice of material deficiencies within ten (10) working days of receipt. In the event DOE provides notice of material deficiencies after ten (10) working days, the Contractor shall be granted day for day relief to the schedule decrement outlined in Table B-2-H-1.

DOE shall provide approval of the SBCP/PDSA within ninety (90) days of accepted submission.

Key Predecessors

Activity ID	Description	Activity ID	Description
7KLDFL327	DFLAW Hazard Analysis		
7KLDFL3430	DFLAW PDSA		

SECTION J – LIST OF ATTACHMENTS ATTACHMENT R PERFORMANCE EVALUATION AND MEASUREMENT PLAN

PERFORMANCE EVALUATION AND MEASUREMENT PLAN

Incentive B – Award Fee

DESIGN, CONSTRUCTION, AND COMMISSIONING OF THE HANFORD TANK WASTE TREATMENT AND IMMOBILIZATION PLANT

CONTRACT NO. DE-AC27-01RV14136

Evaluation Period 2022 January 1, 2022, to December 31, 2022

Bechtel National, Inc.

Richland, Washington Rev. 0 – Effective January 1, 2022



Issued By:

Brian T. Vance Digitally signed by Brian T. Vance Date: 2021.12.09 16:31:43 -08'00'

Brian T. Vance Manager, DOE Office of River Protection/Richland Operations Office Fee-Determining Official

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		Transition to Operations.	9

A. AWARD FEE OBJECTIVES

This Performance Evaluation Measurement Plan (PEMP) contains the following six award fee objectives:

- 1. Project Performance
- 2. Environmental, Safety, Health, and Quality Assurance (QA)
- 3. Direct-Feed Low-Activity Waste (DFLAW) integration
- 4. DFLAW Engineering
- 5. Commissioning, Plant Management, Operational Culture, and Readiness
- 6. High-Level Waste (HLW) Facility.

A.1 EVALUATION PROCESS

The U.S. Department of Energy (DOE), Office of River Protection will evaluate and measure performance for each of the six award fee objectives on a quarterly basis. The contractor will provide a summary of the effectiveness of its Contractor Assurance System to DOE to support the quarterly evaluations. DOE will identify Bechtel National, Inc.'s performance strengths and weaknesses at the end of each of the four quarters, year-to-date for each of the award fee objectives. DOE will assign adjectival ratings only at the end of the fourth quarter. The adjectival ratings for each of the award fee objectives will be based on the entire year's performance (Table 1, "Award Fee – Incentive Ratings and Definitions").

Table 1. Award Fee – Incentive Ratings and Definition. (2 pages)

Adjectival Rating	Definition	Percentage of Award Fee Earned
Excellent	Contractor has exceeded almost all of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award fee evaluation period.	
Very Good Contractor has exceeded many of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award fee evaluation period.		76% to 90%
Good Contractor has exceeded some of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award fee evaluation period.		51% to 75%
Satisfactory	Contractor has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award fee evaluation period.	≤ 50%

Table 1. Award Fee – Incentive Ratings and Definition. (2 pages)

Adjectival Rating	Definition	Percentage of Award Fee Earned
Unsatisfactory	Contractor has failed to meet overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award fee evaluation period.	0%

A.2 AWARD FEE DETERMINATION

Award fee dollars earned are determined by the method presented in Table 2, "Award Fee – Fee Earnings Calculations." The adjectival ratings are as determined in Section A.1 above. The fee-determining official will determine the percent of fee earned according to the ranges in Table 1 above. The award fee dollars earned will be the product of the award fee available and the percent of award fee earned. The fee-determining official may consider any other pertinent factors in making a final fee determination.

Table 2. Award Fee – Fee Earnings Calculation.

	Award Fee Objective Award Fee Available		Adjectival Rating	Percentage of Award Fee Earned	Award Fee Dollars Earned
1	Project Performance	\$2,000,000			
2	Environmental, Safety, Health, and Quality Assurance	\$2,200,000			
3	Direct-Feed Low-Activity Waste Integration	\$372,603			
4	DFLAW Engineering	\$300,000			
5	Commissioning, Plant Management, Operational Culture, and Readiness	\$2,200,000			
6	High-Level Waste Facility	\$800,000			
	Total	\$7,872,603	-		

A.3 AWARD FEE OBJECTIVE 1: PROJECT PERFORMANCE

DOE will evaluate the contractor's cost and schedule performance based upon actual incurred costs compared to the total estimated costs of that work and actual schedule performance as compared to the planned schedule.

The analysis of project performance will consider changed programmatic requirements, changed statutory requirements, and/or changes beyond the contractor's control, which impact cost and/or schedule. DOE will rely on other objective and/or subjective cost and schedule performance

elements, such as critical path and float analysis, to evaluate the contractor's performance, which includes, but is not limited to the following:

- <u>Cost Control</u> The contractor maintains cost control (i.e., actual costs incurred for work
 performed are equal to or less than the planned costs for that work) and actively pursues
 cost containment and reduction through innovative approaches and management of
 resources. Cost control will be monitored against the Performance Measurement Baseline
 for the Low-Activity Waste Facility, Balance of Facilities, and Analytical Laboratory
 (collectively referred to as LBL) and DFLAW.
- Schedule Control The contractor maintains a contract compliant, resource loaded, logic-tied schedule with discrete tasks through contract completion, including credible and accurate critical path network(s) that accurately portray critical work activities toward meeting the contract milestone date for demonstration of DFLAW hot commissioning and implements innovative actions to accelerate the overall project schedule with due consideration to the overall risk profile.
- <u>Communication</u> Demonstrate proactive communication with Corporate Official parent
 companies to identify project issues early and resolve. The contractor is expected to be
 transparent and communicate clearly and effectively for the reporting of data and metrics.
 In addition, it is expected that the contractor works proactively with the Hanford Office
 of Communications to support enhanced communications with all key stakeholders.
- Risk Management The contractor identifies new threats, opportunities, and risk
 mitigations to demonstrate an effective risk program. Risks shall be identified early to
 maximize risk mitigation opportunities and risks shall be tracked, managed, and
 monitored using the Waste Treatment and Immobilization Plant (WTP) Risk Register
 Database until mitigated to the maximum extent practical, avoided, or accepted in
 accordance with formal program requirements. Risk effectiveness shall be reported for
 closed threats, open threats, and opportunities realized.
- Available Funding Utilization The contractor optimizes utilization of funds while
 planning for an appropriate amount of carryover to cover outstanding year-end
 commitments and to provide for the first few weeks of continuing operations into the next
 fiscal year.
- Baseline and Contract Alignment The contractor shall maintain alignment between the
 baseline and the contract. The contractor shall submit quality documents as required to
 support the alignment between the baseline and the contract and to support independent
 reviews.
- <u>Subcontract Management</u> Demonstrate effective subcontract management, including award of subcontracts as scheduled, and inclusion of all requirements, subcontractor audits, and subcontract administration. The contractor will monitor subcontractor performance to ensure compliance with all requirements, including small business subcontracting plans, the Buy American Act, and applicable labor statutes.
 - The contractor will complete a minimum of two subcontractor incurred cost audits to standard (generally accepted auditing standards).

Occupational Safety and Health Administration - Coronavirus disease 2019 (COVID-19) related recordable accidents and/or incidents in the Computerized Accident/Incident Reporting System or total recordable case and/or days away, restricted, or transferred data will not be used in evaluating contractor performance. However, if the contractor has demonstrated poor performance in maintaining COVID-19 protocols (e.g., maintaining appropriate industrial hygiene practices or correcting social distancing procedures after a COVID-19 related situation has been brought to its attention), that failure may be considered in the evaluation.

Within each of the areas listed above, DOE will evaluate the contractor's assurance system based on the following:

- Methods of monitoring and measuring performance, including metrics, assessments, surveillances, and other operational activities, are effectively used to provide an accurate representation of the current performance of mission objectives and goals, to include performance of a safety, health, environment, and quality program relative to defined standards.
- Demonstrate that management system owners and levels of management are aware of applicable requirements and the status of compliance to those requirements.
- Demonstrate that risks to mission and operations are being effectively identified, monitored, communicated, and managed (i.e., accepted, avoided, or mitigated).
- Demonstrate a healthy self-critical approach to ensuring actions taken to manage risks or issues are appropriately effective.
- Timely, open, and continuous communication on mission and operations risks and issues with DOE.
- Lessons learned experiences and good practices are used to inform applicable
 organizations of adverse work practices or experiences and are incorporated into the
 overall work process to improve mission and operations performance.

A.4 AWARD FEE OBJECTIVE 2: ENVIRONMENTAL, SAFETY, HEALTH, AND OUALITY ASSURANCE

DOE will assess this award fee objective in the areas of environmental permitting and compliance; nuclear safety; QA; safety, health, and quality programs; and the Contractor Assurance System.

A.4.1 Environmental Permitting and Compliance

Evaluations of the contractor's performance will be based on:

- Maintain a constructive and effective working relationship with all regulatory agencies to maximize the probability of successful delivery of the DFLAW Program.
- Development and implementation of an integrated environmental protection program that applies best commercial practices and assures compliance with environmental requirements.

- Development of required applications for permits; licenses; and other regulatory approvals required for design, construction, and specifically commissioning of WTP.
- Effective collaboration and integration with other Hanford contractors to provide data for sitewide regulatory monitoring and reporting.
- Contractor will assess and track environmental performance. Contractor's work shall be
 accomplished in a manner that achieves high levels of quality, and protects the
 environment, workers, and the public.
- DOE will rely on evaluations of the contractor's performance in areas that include but are
 not limited to quality and timeliness of permit applications and other deliverables
 required to support project execution, proactive assessment of the environmental
 protection program, efforts to continuously improve, and regulatory compliance –
 including the number and seriousness of any findings or concerns.
- Submittal of permitting products with a high degree of quality and which enable schedule efficiencies.

A.4.2 Nuclear Safety

This element is focused on the contractor's implementation of nuclear safety bases and the Chemical Safety Management Program (CSMP).

DOE will perform both objective and subjective evaluations of the contractor's efforts to:

- Demonstrate effective and timely response to DOE-identified, externally identified, contractor-identified, and self-revealing issues pertaining to nuclear safety bases and the CSMP.
- Demonstrate and implement continuous improvement initiatives for nuclear safety bases and the CSMP that shorten the schedule and/or enhance safety, performance, and efficiency.
- Effectively integrate with the appropriate work groups (e.g., Plant Management; Plant Engineering; Environmental, Safety, and Health) to accomplish the workscope for nuclear safety bases and CSMP submittals.
- Effectively implement applicable regulations, requirements, and commitments in submittals for nuclear safety bases and the CSMP.
- Measure quality and timeliness of issue resolution and submittals for nuclear safety bases and the CSMP, communicate the quality and timeliness status to DOE, and take appropriate action to mitigate downward trends.

A.4.3 Quality Assurance

The QA program and quality of performance objective will evaluate the contractor's actions to strengthen the existing QA program, resolve QA issues, support the implementation of the commissioning and operations QA program, and improve the overall quality culture on the WTP Project.

DOE will perform both objective and subjective evaluations of the contractor's efforts to:

- Demonstrate implementation and effectiveness of the approved QA program for engineering, procurement, and construction (EPC) activities in support of startup testing, commissioning testing, and operations.
- Implement a commissioning and operation program in accordance with the DOE
 approved 24590-WTP-PD-RAQA-QA-0001, Quality Assurance Program Description
 and demonstrate that the program has been adequately implemented to support ongoing
 DFLAW activities including startup testing, commissioning testing, and Analytical
 Laboratory operations.
- Identify and demonstrate effective handling of emerging QA program issues and of
 program backlog (e.g., condition reports and nonconformance reports) for both EPC and
 commissioning and operation QA programs to reduce the backlog to a manageable and
 appropriate list of open prestart issues in preparation for an operational readiness review.
- Demonstrate application of the approved graded approach to achieve efficiencies and
 quality improvement. Plan, schedule, and perform effective QA surveillances including
 verifying compliance with the approved QA program (e.g., QA program description,
 graded approach, QA manual [EPC only], QA implementation plan [commissioning and
 operation only]), and flow down of requirements into the QA program. In addition,
 include bias-based coverage for higher consequence processes and activities.
- Demonstrate effective management of plant-installed software QA program.
 Management of the plant-installed software QA program includes implementation of the QA program description and QA implementation plan, startup and commissioning verification, and validation testing and resolution of all startup/commissioning/plant operations software quality issues including software issues as needed to achieve readiness prior to DFLAW startup.

A.4.4 Safety and Health Programs

DOE will perform both objective and subjective evaluations of the contractor's efforts to:

- Maintain and strengthen an effective nuclear safety quality culture recognized by employees and stakeholders as sustaining a safety conscious work environment where safety, quality, or other concerns can be raised without fear of retaliation.
- Demonstrate safety performance is being actively monitored and evaluated to systematically improve culture and processes.
- Demonstrate that an effective work hazard analysis and controls process has been implemented to reduce injury/illnesses and workplace hazards.
- Demonstrate implementation and effectiveness of the worker safety and health program for EPC activities.
- Demonstrate progress to develop and implement safety management programs as needed to achieve readiness prior to the scheduled DFLAW startup. Safety management programs to be evaluated within this element include emergency preparedness, fire

protection, radiation protection, hoisting and rigging, chemical safety management, and worker safety and health.

A.5 AWARD FEE OBJECTIVE 3: DIRECT-FEED LOW-ACTIVITY WASTE INTEGRATION

Performance measurement in this element will include focus on an empowered and leading DFLAW integration team focused on the timely alignment of interfaces, elimination of process discrepancies, early identification of issues, and mitigating program risks associated with startup and commissioning. DOE will assess this award fee objective in the following areas:

- Effectively coordinate the projects that comprise the DFLAW Program; competing or unaligned priorities are identified and resolved between contractors or elevated through the DFLAW Program for resolution
- Ensure the interfaces between the projects are effectively managed, scheduled, and tracked so that the integrated DFLAW Program is completed successfully
- Ensure the DFLAW portfolio of projects operate as an integrated system without inconsistencies or conflicts at the project and contractor interfaces
- Ensure solutions brought to DOE are timely and represent best value outcomes; products
 are fully developed with specific actions and vetted recommendation as necessary;
 resulting actions are tracked to closure
- Enhance communications, teamwork, and trust between DFLAW Program partners to unify all aspects of the integrated DFLAW Program
- Ensure the DFLAW Program is fully validated across all partners with a One Hanford approach through utilization of the Phase-Gate Process toward ultimate achievement of DFLAW operations.

A.6 AWARD FEE OBJECTIVE 4: DFLAW ENGINEERING

DOE will assess this award fee objective in the areas of Engineering performance based upon the information summarized in this section.

A.6.1 Corrective Action Management and Issue Management for Engineering

 Demonstrate a condition report self-identification rate of 80 percent, defined as internally self-identified issues divided by the total number of issues identified. Total number of issues identified includes internally self-identified, externally identified, and self-revealed issues.

Note: Self-revealed issues are not part of the set of self-identified issues.

When the current self-identification rate is less than 80 percent, demonstrate consistent improvement throughout the year (at least a 5-percentage point improvement in the self-identification rate per quarter until the goal is met/maintained or exceeded).

 Demonstrate open actions assigned to plant engineering (from nonconformance reports, condition reports, tickets, etc.) are tracked, prioritized, and completed. Utilize metrics

- developed during calendar year (CY) 2021 and demonstrate improvement throughout the year (e.g., work-off curves).
- Plant engineering-related issue report closures are found to be satisfactory, demonstrated by independent evaluations (e.g., DOE Office of River Protection assessments or internal assessments other than self-assessments) of issue closure. Independent evaluations exhibit a sound closure basis at least 85 percent of the time.

A.6.2 Configuration Management

The WTP configuration management program and all of its elements are implemented and managed to ensure the following:

- Field changes plus all design documentation change notices (e.g., in-plant verification report, alarm permissive interlock override installation) represent less than 5 percent of all quarterly changes made to structures, systems, and components (SSC) / software post-handover. Design change packages (DCP) are verified as implemented in the plant physical/software configuration and are incorporated into facility documentation and training documentation within 28-days of the DCP being first issued in average per quarter and represent 95 percent of all changes to SSC / software post-handover (i.e., DCP full closure is issued within 28-days of the DCP being first issued in average per quarter).
- One hundred percent of software changes made post-handover are traceable to formal documentation kept under configuration management.
- Post-handover, a 100 percent of design and facility documentation have sufficient level of detail to support safe plant commissioning operations and maintenance.
- Post-handover, additional component tag numbers requested by Plant Management are consistent with the plant physical configuration and facility documentation within 28 days of the request.
- All DFLAW essential drawings and facility documentation are updated to incorporate post-handover design changes within 28 days of the design change being first issued.
- As-built configuration is periodically reverified (once per quarter) through plant engineering self-assessments that include walkdowns.
- Ninety-five percent of DFLAW SSCs temporary modifications are removed and original
 configuration is restored or are converted to permanent changes within 3 months of being
 active. One hundred percent of DFLAW SSCs temporary modifications projected to last
 longer than 3 months have a closure date when they must be removed and original
 configuration restored or converted to permanent changes.
- One hundred percent of DFLAW SSCs temporary modifications necessary to support
 commissioning testing are identified in formal commissioning testing documentation.
 Specifically, commissioning tests are performed in the configuration depicted in issued
 for construction design documentation plus necessary temporary modifications to
 conduct the test.

A.6.3 Engineering Products

- Issue engineering products that have high technical and administrative quality. High
 quality is defined as lack of technical errors, referencing correct revisions, minimal
 administrative errors, implementation of correct requirements, clear and concise detail,
 etc.
- Demonstrate implementation of CSMP. Implementation can be demonstrated through
 assessments, issue identification from internal oversight and closure of corrective actions.
 CSMP implementation should include defining the enhanced role of system engineers as
 they relate to chemical safety systems and how formal system health will be maintained
 for designated systems before, during commissioning operations, and during full
 operations.
- DCPs are prioritized and completed in support of project milestones. Priority and completion status is regularly reported (i.e., at least quarterly) to the Office of River Protection and demonstrated to not impact project milestones.

A.6.4 Transition to Operations

Scheduled activities supporting a successful transition to operations during CY 2022 are listed in Table 3. Performance is based on successful completion of the activities and all predecessor activities in Table 3, prior to the scheduled forecast date according to the most current approved Level 4 schedule as of January 1, 2022.

Table 3. Calendar Year 2022 Scheduled Activities Supporting a Successful Transition to Operations.

Schedule ID	Activity Description	Baseline Start	Baseline Finish
	First Quarter		
5HLC3CYB50	"LAW - PENG - implement tape backup system design"	22-Jan-22	22-Jan-22
5HLC3P2D190	"LAW - PENG - review & approve DFLAW process DQO"	25-Jan-22	25-Jan-22
5HLC3CYB1000	"LAW - PENG - Cyber Security complete - finish milestone"	N/A	2-Mar-22
	Second Quarter		
5HLC3PCT2600	"LAW - PENG - conduct combined melter operations – review work package"	24-Apr-22	24-Apr-22
5HLCFIGZ0102	"LAW PENG IUV testing - LAW glass app with SAS Viya - implement requirements in software (programming)"	8-May-22	8-May-22
	Third Quarter		
5HLC3PDCP160	"LAW PENG complete DCPs - CC - tuning & M2HU - PP"	16-Jun-22	17-Jul-22
5HLC3FIGZ06	"Analyze results from simulant foaming demo"	15-Jul-22	31-Jul-22
5HLC3FIGZ01	"LAW PENG Analyze results from ILAW product qual demo"	21-Aug-22	6-Sep-22
	Fourth Quarter		
5HLCFIGZ0106	"LAW - PENG - In-use verification testing of LAW Glass App using SAS Viya - perform software testing"	4-Oct-22	4-Oct-22
5HLC3PDCP800	"LAW - PENG - complete DCPs - CC - EPDT & ORR - PP"	30-Oct-22	30-Nov-22

ID = identifier. N/A = not applicable.

A.7 AWARD FEE OBJECTIVE 5: COMMISSIONING, PLANT MANAGEMENT, OPERATIONAL CULTURE AND READINESS

DOE will assess this award fee objective in the areas of startup, commissioning and plant management, and readiness based on criteria in the following sections.

A.7.1 Startup

- Complete testing of all systems handed over to support operations January 2022
- Issue all startup test results packages and startup test indices first quarter.

A.7.2 Commissioning and Plant Management

- Continue optimization of the commissioning test program through implementation of a
 healthy continuous improvement culture demonstrated through effective use of corrective
 action processes, institutionalizing lessons learned, and proactive response to emergent
 issues
- Establish programs and processes such as preventative maintenance (PM) optimization, cycle schedules, and evaluation of upcoming PM tasks for deferral or elimination that support the efficient use of maintenance resources and ensures high equipment reliability
 - Achieve a 3-month rolling average at or below five delinquent DFLAW PMs and 10 delinquent Analytical Laboratory PMs for second quarter through fourth quarter
- Establish corrective maintenance age metrics and associated prioritization schemes that achieve the following objectives:
 - DFLAW priority 1 (immediate) corrective maintenance work order cycle time less than 7-days achieved by the end of first quarter with a sustained 3-month rolling average of less than 7 days for the remainder of CY 2022
 - DFLAW priority 2 (high) corrective maintenance work orders attributed to safety and compliance cycle time less than 30-days achieved by the end of first quarter with a sustained 3-month rolling average of less than 30 days for the remainder of CY 2022
 - Twenty-five percent reduction in DFLAW priority 2 and 3 work orders older than 180 days by end of third quarter with sustained performance through the end of CY 2022
- Perform single melter operations (5HLC3JA17474, LAW OPS Perform MH1 Single Melter Operations (COWP-WC-03261)) – first quarter
- Complete Low-Activity Waste Facility water runs phase test report (5HLC3JA17434, *JTG Approve Water Runs Phase Test Report*) – second quarter
- Perform single melter operations with cold commissioning simulant (5HLC3JA17544, LAW – OPS – Perform Melter 1 Operations w/CC Simulant (COWP-WC-21-01998)) – third quarter

- Perform Melter 2 heat-up activities (5HLC3JA17764, LAW OPS Perform Melter 2 Refrac. Conditioning and Frit Addition) – third quarter
- Perform dual melter operations (5HLC3JA17564, LAW OPS Perform Dual Melter Operations (COWP-WC-21-04649)) – fourth quarter
- Complete Melter 1 heat-up phase test report (5HLC3JA17524, LAW OPS JTG Approve Melter 1 Heatup Phase Test Report) fourth quarter.

A.7.3 Readiness

- Perform radiological control assessment (5HLC3W0D870, LAW RA-Radcon Management Assessment) – third quarter.
- Perform cold commissioning management assessment (5HLC3JAB6351, Conduct Cold Commissioning Management Assessment (CCMA)) – second quarter.
- Complete Melter 2 heat-up operational readiness checklist evolution (5HLC3JAB6341, Conduct Melter 2 Heatup ORCL Evolution) third quarter.
- Successful completion of the emergency preparedness exercise (5HLC3W1185, LAW-EP-Perform WTCC Emergency Preparation Exercise (CORR & DORR Team Oversight)) fourth quarter.
- Demonstrate effective readiness schedule management through schedule performance metrics.
- Contractor provides adequate self-assessment of readiness activities. Contractor ensures
 effective interfacing and interactions between readiness assurance and plant management.
 Contractor utilizes their Readiness Certification Assurance Process Tracking System for
 tracking readiness activities and issues from inception through issue closure.
- Consistent evaluation, identification, and documented closure of pre-start items for cold commissioning.
- Tracking, correcting, and documenting closure of open items affecting safe/effective Melter 2 heat-up.
- Identification, resolution, and documented closure of open items affecting successful completion of the cold commissioning management assessment.

A.7.4 Operational Culture

Occurrence reporting:

- Facility status and event notifications are provided to DOE; notifications are timely and accurate
- Contractor self-reports events and their causes and implements effective corrective actions to prevent recurrence of significant or consequential events.

Conduct of operations:

- Ensure effective interfacing and interactions between construction, startup and commissioning, and plant management organizations to provide safe and reliable operations.
- Implement the contractor's Conduct of Operations Council to ensure continuous improvement that produces effective results for facility operations.
- Implement the contractor's processes for safe operations as applied to operational, maintenance, and construction activities. Incorporate practices resulting in an effective hierarchy of controls to mitigate WTP hazards.

Operational training:

- Implement an effective contractor training program as evidenced through knowledgeable operators and managers within the control room, at the simulator, and throughout WTP.
- Demonstrate proactive processes for enhancing operator knowledge and maturity.
- To maximize the efficient utilization of line and training resources developed an
 accountability process for training attendance, including developing a performance metric
 and communicating expectations by January 21, 2022.
- Achieve scheduled training performance goal of less than 15 percent no-shows or late (i.e., less than 24 hours) notifications, barring personal emergencies by the end of second quarter with sustained performance for the remainder of CY 2022.
- Satisfactorily complete corrective actions for condition report 21-00436 ORP Letter of
 Concern of WTCC Training Program Implementation, resulting in effective systematic
 approach training-based training programs. This successful end state will be validated by
 an external assessment of the Waste Treatment and Completion Company, LLC training
 programs resulting in no findings identifying continuing program weaknesses.

Operational oversight:

- Evaluate the cultural behaviors of the operations staff to ensure that the organization is in alignment with the tenets of a strong nuclear safety and quality culture (e.g., integrated safety management, integrity, transparency, procedural compliance).
- Demonstrate effective evaluation and control of operational plant equipment.
- Ensure that identified abnormal conditions, events, and/or deficiencies are addressed with timely and effective corrective actions. Track and trend minor issues through established processes (e.g., Corrective Action Management Program, collective significance review) to verify that lessons learned are being leveraged to improve operational performance.
- Demonstrate effective self-assessment of handed over system/equipment to operations.
- Plant Management ensures safe configuration and/or corrective actions in response to identified abnormal condition and/or deficiencies.
- Ensures effective interfacing and interactions between construction, engineering, and plant management.

Reviews minor events or problems in contractor's organization, management, personnel
abilities, or practices with attention to detail in identifying, tracking, trending, collective
significance evaluation and corrects these minor problems ensuring significant
improvements in contractor's performance.

A.8 AWARD FEE OBJECTIVE 6: HIGH-LEVEL WASTE FACILITY

DOE will assess this award fee objective in the following sections.

A.8.1 Completion of Design Reviews for Multiple Systems

Preliminary (60 percent) and detailed (90 percent) design reviews and additional engineering activities will be completed for the following HLW Facility systems, to ensure that the system design meets the requirements:

- First quarter:
 - 60 percent design completion report for the environmental monitoring system
 - 90 percent design completion report for the demineralized water system
 - 90 percent design completion report for the domestic potable water system
- Second quarter:
 - Completion of the HLW melter process system
 - Completion of melter analysis and design modifications
- Third quarter:
 - 60 percent design review of the C1/C2/C3 ventilation systems
 - 60 percent design review of the uninterruptible power electrical system
 - 90 percent design review of the high-pressure steam, low-pressure steam, steam condensate water systems
- Fourth quarter:
 - 90 percent design completion report for the breathing service air system
 - 90 percent design review of the canister receipt handling system and pour handling system
 - 90 percent design completion report for instrument service air system.

A.8.2 Perform High-Level Waste Preliminary Documented Safety Analysis Updates

Maintain alignment between the HLW Facility design and the nuclear safety basis by performing the following updates:

Submittal of 24590-WTP-PSAR-ESH-01-002-04, Preliminary Documented Safety
Analysis to Support Construction Authorization; HLW Facility Specific Information,
Rev. 11 with DOE of updated hazard analysis for filter handling, radioactive waste
handling, and the C5 ventilation engineering study by third quarter, and DOE approval by
fourth quarter

- Advance the ashfall nuclear safety controls with completion of the following:
 - Detailed documentation of the event description and timeline for ashfall event by second quarter
 - Complete evaluation of detailed leak path factors for contamination release to atmosphere by third quarter
 - Complete evaluation of temperature effects to the HLW Facility structures, systems, equipment, and vessel hydrogen generation and purging, during HLW Facility passive safe shutdown response to ashfall event by fourth quarter
 - Issuance of ashfall consequence calculation by fourth quarter.

A.8.3 Procurement and Construction Activities

Completion of the following procurement and construction activities to support HLW Facility 90 percent design and construction restart:

- Award custom fabrication equipment purchase order by third quarter
- Award HLW melter feed process melter feed and preparation vessel purchase order by third quarter
- Award HLW melter feed process vessel agitators purchase order and subcontract for seismic qualification by fourth quarter
- Complete market research and supply chain prequalification equipment suppliers list for major procurements to support planned awards in fiscal year 2023 / fiscal year 2024, by second quarter
- Develop plan for restart of major construction and subcontracts to support design and construction build sequence by fourth quarter.

B. PERFORMANCE EVALUATION AND MEASUREMENT PLAN GENERAL INFORMATION

B.1 CONTRACT INCENTIVE FEE STRUCTURE

Contract No. DE-AC27-01RV14136, Design, Construction, and Commissioning of the Hanford Tank Waste Treatment and Immobilization Plant, utilizes multiple, performance-based incentive fee components to drive contractor performance excellence in completing the design, construction, and commissioning of the contract.

The award fee provides a performance incentive for the contractor and gives the Government a tool to identify and reward superior performance.

B.2 PROCESS

The total available award fee for the 2022 evaluation period is \$7,872,603.

In accordance with FAR 16.401(e)(3)(v), "Incentive Contracts," "General," the contractor is prohibited from earning any award fee when the contractor's overall cost, schedule, and technical performance is below satisfactory.

B.3 PROVISIONAL FEE

Provisional fee requirements in Contract No. DE-AC27-01RV14136, Section B, Clause B.8(g), "Provisional Payment of Fee," apply to this PEMP.

B.4 CONTRACTOR SELF-ASSESSMENT

Contract No. DE-AC27-01RV14136 Section B, Clause B.8(f) states:

Following each evaluation period, the Contractor may submit a self-assessment, provided such assessment is submitted within ten (10) calendar days after the end of the period. This self-assessment shall address both the strengths and weaknesses of the Contractor's performance during the evaluation period. Where deficiencies in performance are noted, the Contractor shall describe the actions planned or taken to correct such deficiencies and avoid their recurrence. The Contracting Officer will review the Contractor's self-assessment, if submitted, as part of its independent evaluation of the Contractor's management during the period.

B.5 METHOD FOR CHANGING THE PERFORMANCE EVALUATION AND MEASUREMENT PLAN DURING THE EVALUATION PERIOD

Proposed changes to the current period PEMP may be initiated by either DOE or the contractor. Proposed changes shall be in writing. Both DOE and the contractor must agree to any changes. Once agreement is reached, the fee-determining official and contractor representative will sign the revised PEMP. The revision number (e.g., Rev. 1) will be noted on the PEMP. Subsequently, the revised PEMP will be incorporated into the contract by reference via contract modification.

ABBREVIATIONS AND ACRONYMS

CSMP Chemical Safety Management Program

CY calendar year

DCP design change package

DFLAW direct-feed low-activity waste DOE U.S. Department of Energy

EPC engineering, procurement, and construction

HLW high-level waste

LBL Low-Activity Waste Facility, Balance of Facilities, and Analytical

Laboratory

PEMP performance evaluation measurement plan

PM preventative maintenance

QA quality assurance

SSC structure, system, and component

WTP Waste Treatment and Immobilization Plant

REFERENCES

- 21-00436, 2021, ORP Letter of Concern of WTCC Training Program Implementation CNN 325066, Rev. 0, Bechtel National, Inc., Richland, Washington, May 11.
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